2025 INUVIK COMMUNITY ENERGY PLAN

Arctic Energy Alliance

TOWN OF INUVIK
Our Community • Our Spirit

Introduction and Acknowledgements

This updated Community Energy Plan describes what was done during the energy planning process that took place between October 2024 and March 2025 and outlines an action plan for what we need to do next.

We would like to thank the community members of Inuvik and community organizations for contributing their time and knowledge to support the creation of this Energy Plan. We appreciate everyone who participated in engagement activities through attending community meetings and providing feedback in the public surveys.

We would like to say mahsi cho / hai cho / quyanainni / thank-you to the following people and organisations who helped create this community energy plan:

- Community members of Inuvik
- Community Energy Champion, Cheryl Greenland
- The Government of Canada Northern REACHE Program and the Government of the Northwest Territories, who funded this project
- Arctic Energy Alliance
- The Town of Inuvik
- Gwich'in Tribal Council
- Inuvialuit Regional Corporation
- Inuvik Native Band
- Inuvik Community Corporation
- Nihtat Gwich'in Council
- Inuvik Métis Council

Cover photo by Kristian Binder

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Executive Summary

The Community Energy Plan (CEP) outlines a strategic approach to optimizing energy consumption, reducing costs, and enhancing sustainability. The goal is to improve energy efficiency, integrate renewable sources, and ensure a reliable energy supply while minimizing environmental impact.

The CEP prioritizes achieving energy security and independence in Inuvik. This is done by listening to community feedback; shaping a plan tailored to Inuvik's energy goals; and working to ensure that local economies continue to grow and thrive, and that community members have access to safe, affordable and reliable energy that will be sustainable for generations to come.

Developed through a partnership between the Town of Inuvik (TOI) and the Arctic Energy Alliance (AEA), the CEP is guided by a Community Energy Champion (CEC) who plays a key role in engaging residents, coordinating initiatives, and ensuring community-led decision-making. To strengthen local energy leadership and build local capacity, the CEC received training and ongoing support from AEA.

The traditional knowledge of the Gwich'in, Inuvialuit and Métis people play a vital role in modern governance, climate research, and sustainable energy development. By upholding and integrating this knowledge into community energy planning, we can align solutions with traditional values, support energy sovereignty, and ensure that Inuvik's energy future respects and sustains the local environment.

Vision Statement

"We will build a sustainable, resilient, and self-reliant community powered by local natural gas, clean renewable energy and local resources. We will reduce reliance on imported fuels, lower energy costs, and enhance energy security for future generations."

Goal	Strategy
Enhance energy efficiency in buildings and community infrastructure	• Promote energy-efficient building standards for new buildings • Retrofit public buildings to improve energy efficiency • Support cost-effective, energy-efficient upgrades for homes and commercial buildings • Promote Sustainable land use and community planning
Reduce transportation-related emissions	• Assess and promote the feasibility of electric and hybrid vehicles in Inuvik • Evaluate sustainable public and municipal transportation solutions • Promote the installation and use of Integrated Parking Lot Controllers (IPLCs) to optimize energy use for vehicle heating • Encourage active transportation
Expand the use of renewable energy	• Advocate for changes to enable greater renewable energy integration • Maximize wind power utilization and grid efficiency • Increase solar energy adoption • Expand the use of biomass for heat and power generation
Reduce dependency on imported fuel	• Integrate the Inuvialuit Energy Security Project (IESP) into the region's energy infrastructure to replace the Ikhil wells with gas from the M-18 well • Strengthen local food security • Expand the use of locally sourced biomass • Explore alternative clean energy options
Enhance community energy literacy and workforce capacity	• Educate residents about energy-saving measures, renewable energy options and available incentives • Foster engagement and energy education for children and youth • Build educational and training opportunities for youth • Improve education for local contractors on installing and maintaining renewable energy systems • Expand access to Wood Energy Technology Transfer (WETT) certification and services in Inuvik • Foster a culture of energy conservation and environmental stewardship

What is a Community Energy Plan?

An energy plan shows what a community decides to do, over a certain period of time, to use energy more wisely.

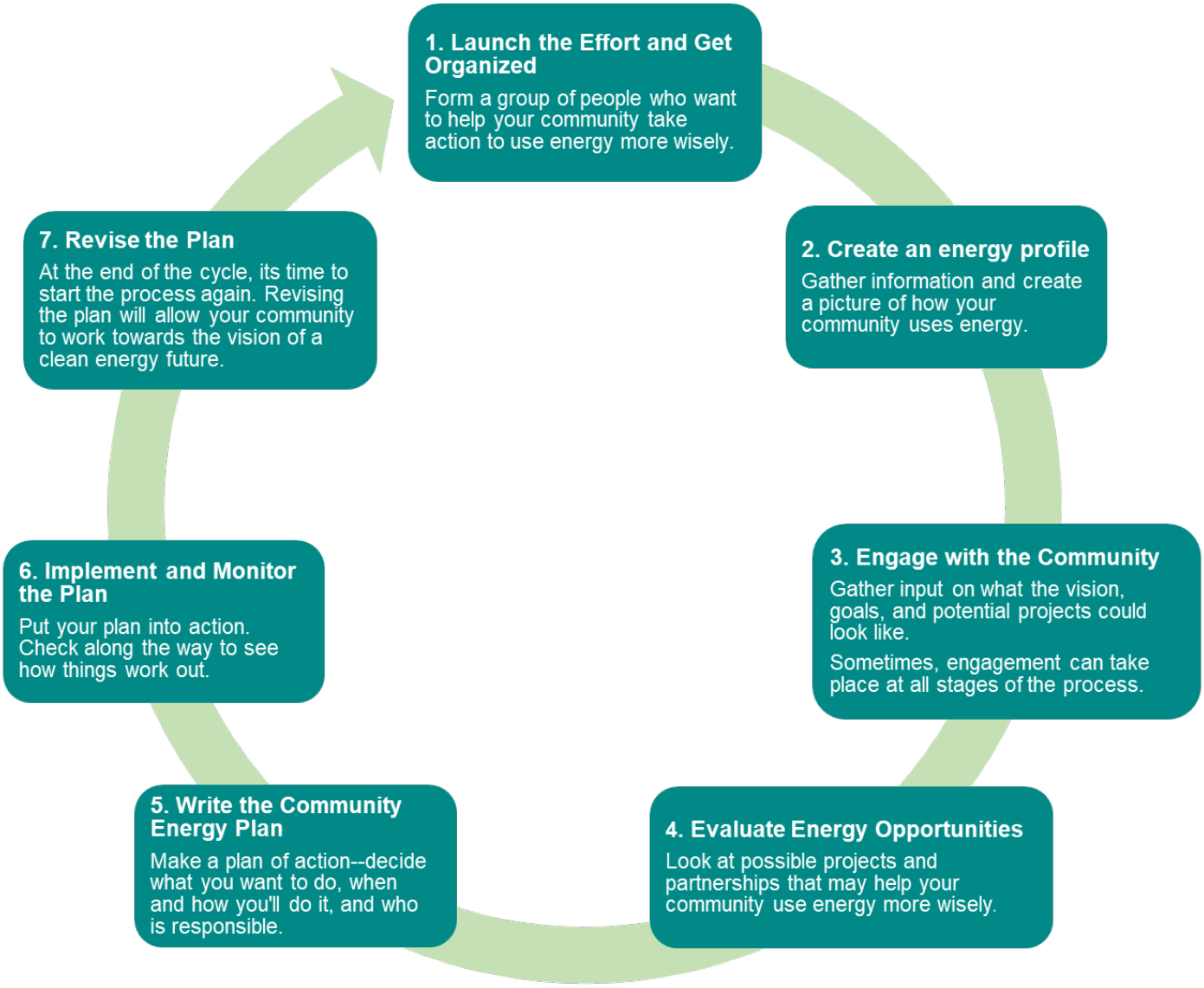
This Community Energy Plan (CEP) explains the energy planning process used, describes how energy is currently used, and outlines strategies for next steps.

Energy planning is a cycle. The cycle might last for one, three, or five years. During each cycle, the community develops and carries out certain projects (strategies) that make up the energy plan for that time period.

At the end of the time period, the community reviews the energy plan and their energy use, recognizes the actions and projects that were achieved, decides what other projects they can do, and continues to work towards their vision of a healthier, cleaner energy future.

The diagram shown on the next page is a 7-step community energy planning process a community can use to develop an energy plan. This updated Community Energy Plan is the result of the completion of Step 7 in the planning process.

7 Steps – The Community Energy Planning Process



Community Profile

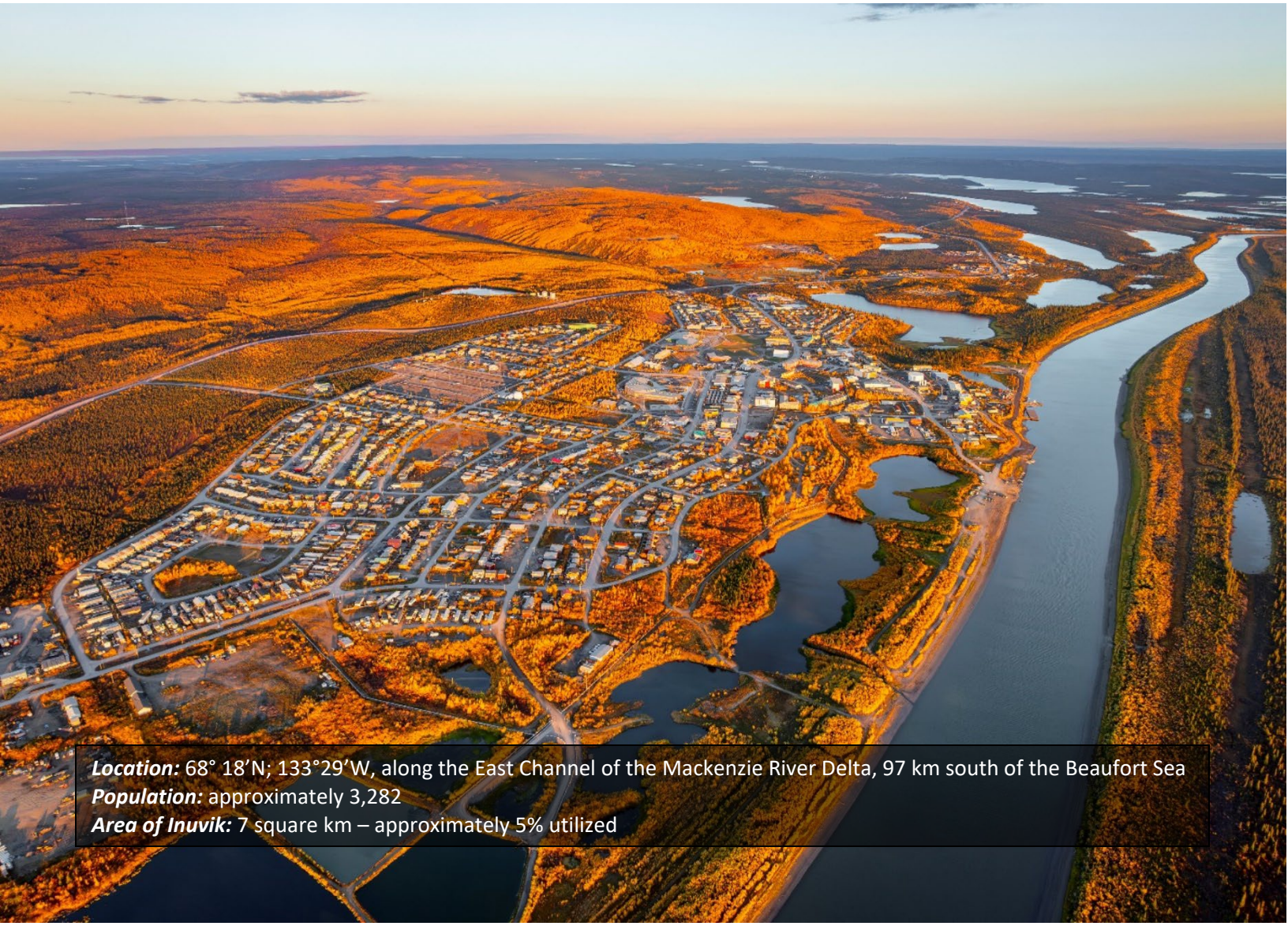


Photo by Kristian Binder

History

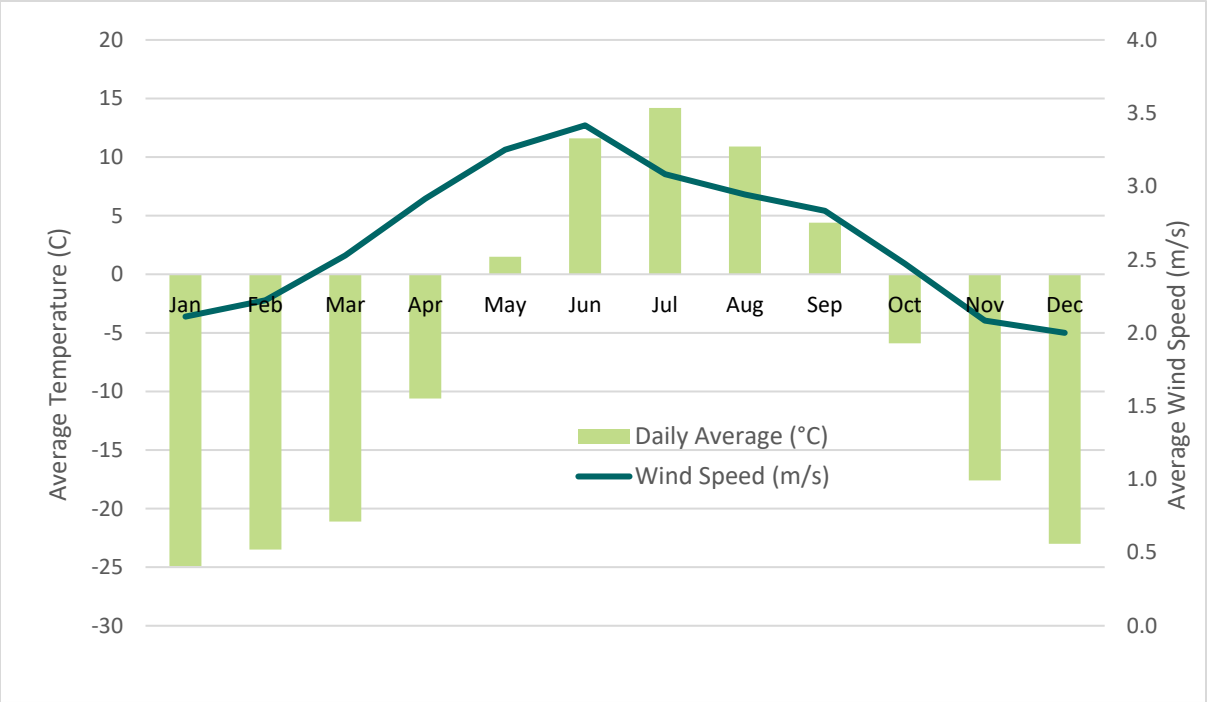
Inuvik was conceived in 1953. The Government of Canada felt there was a need for an administrative centre in the Western Arctic. Aklavik, the traditional centre, was subject to flooding and erosion, and space was limited. Thus, a search for a new site was launched. Originally the community was designated "East Three" by the survey parties who spread over the Mackenzie Delta searching for town site locations. Of six sites on the west side and six sites on the east side, East Three was chosen for its large, flat area, navigable waterway, tree cover and gravel supply.

The community was first named the “New Aklavik” to reflect the transfer of facilities from Aklavik. This caused confusion for the delivery of mail and supplies, so the name “Inuvik” was selected on July 18, 1958, which means “Place of Man” in Inuvialuktun. Inuvik was the first planned town north of the Arctic Circle. Inuvik, as stated on the town monument, dedicated by Rt. Hon. John Diefenbaker, was created as a model community to provide “the normal facilities of a Canadian town.” It was designed not only as a base for development and administration, but as a centre to bring education, medical care, and new opportunities to the Western Arctic.

In April 1967, Inuvik achieved village status, and in January 1970 it became a town with an elected mayor and council. And with the completion of the Dempster Highway in 1979, Inuvik became part of the Canadian Highway system. Today, Inuvik is the government centre and transportation hub for the Western Arctic. Since 1979 Inuvik has been the end of the Dempster Highway, thus connecting the Arctic with southern communities. Inuvik is also the start of the Inuvik–Tuktoyaktuk Highway connecting southern Canada to the Arctic Ocean.

Climate

Weather: Inuvik enjoys 56 days of 24-hour daylight (late June, July and first part of August) and has 30 days without sunlight in December and the first part of January.



Monthly temperature (degrees Celsius) and average wind speed (metres per second) for Inuvik.

Heating and Cooling Degree Days for Inuvik (10-year average)[2]

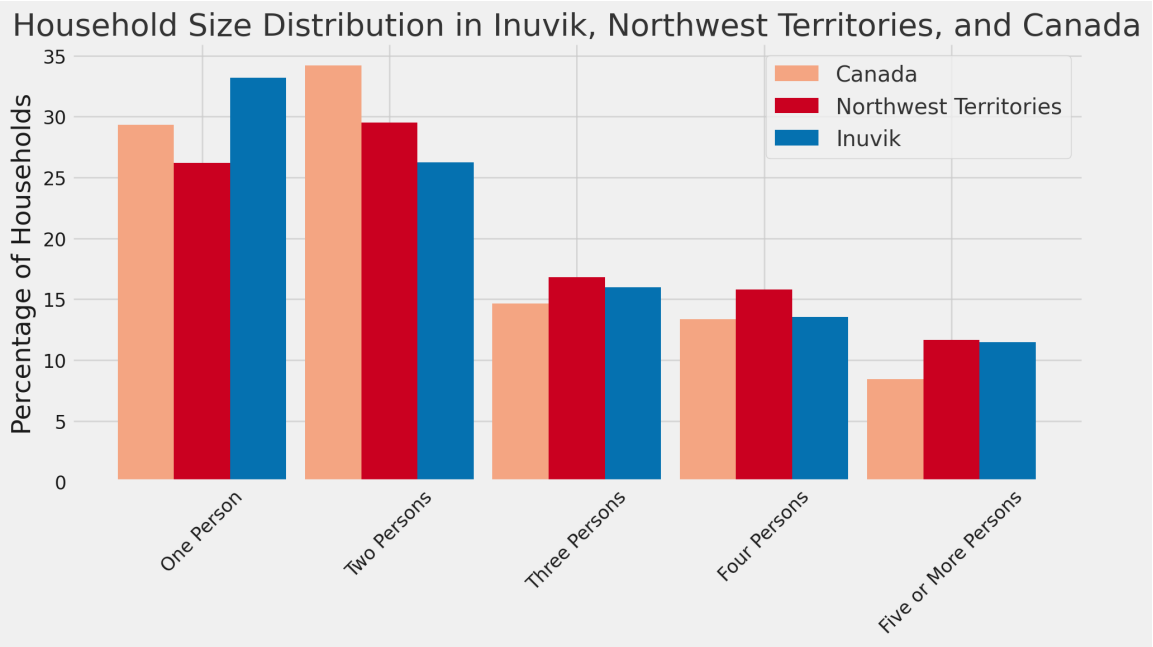
- 10-year average 2015-2024 Heating Degree Days = 8,754
- 10-year average 2015-2024 Cooling Degree Days = 42

Demographics & Housing

Household Size

Inuvik has a higher proportion of one-person households (33%) compared to both the Northwest Territories and Canada. Smaller households, particularly one- and two-person homes, make up the majority, which could impact housing needs and energy consumption patterns. Larger households of four or more people are less common, aligning with national trends.

Survey data from the Inuvik Community Energy Plan (CEP) supports this trend, with 15% of respondents living alone and 24% living in two-person households. Meanwhile, 17% reported living in four-person homes, and 4% reported living in homes with more than six people. This suggests that, while most homes are small, a portion of the population lives in larger households with potentially different energy needs.

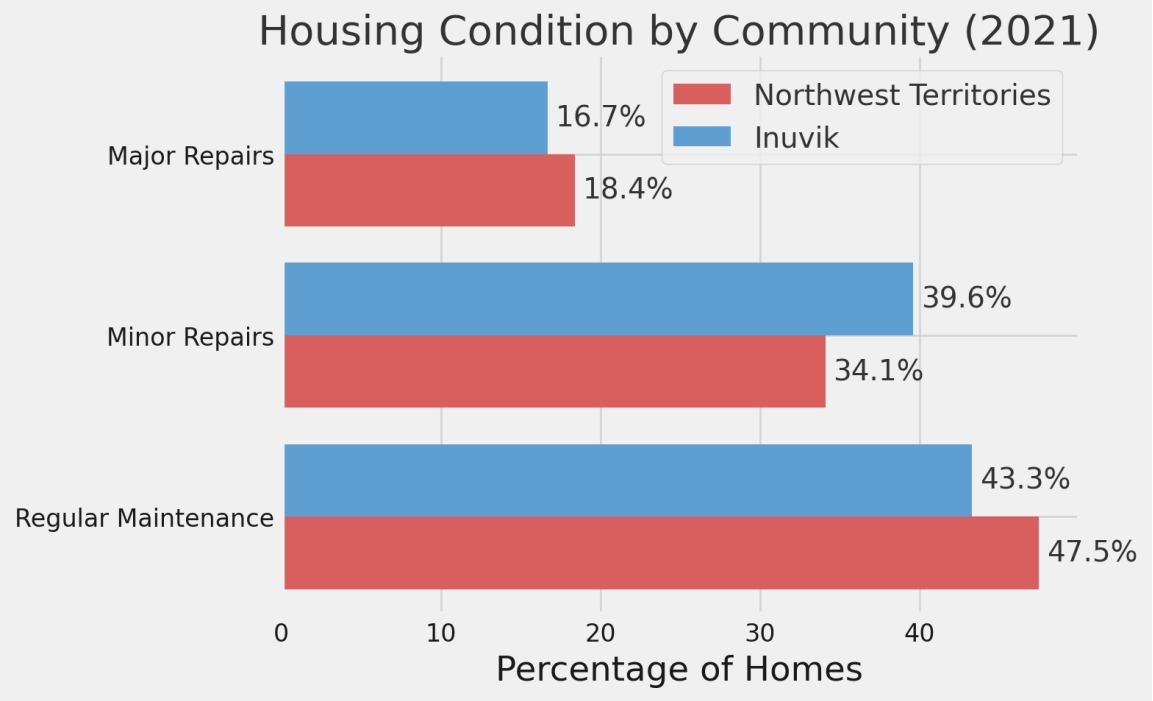


Data source: *NWT Bureau of Statistics (Statistics Canada, 2021 Census).*

[2] Source: Environment and Climate Change Canada.

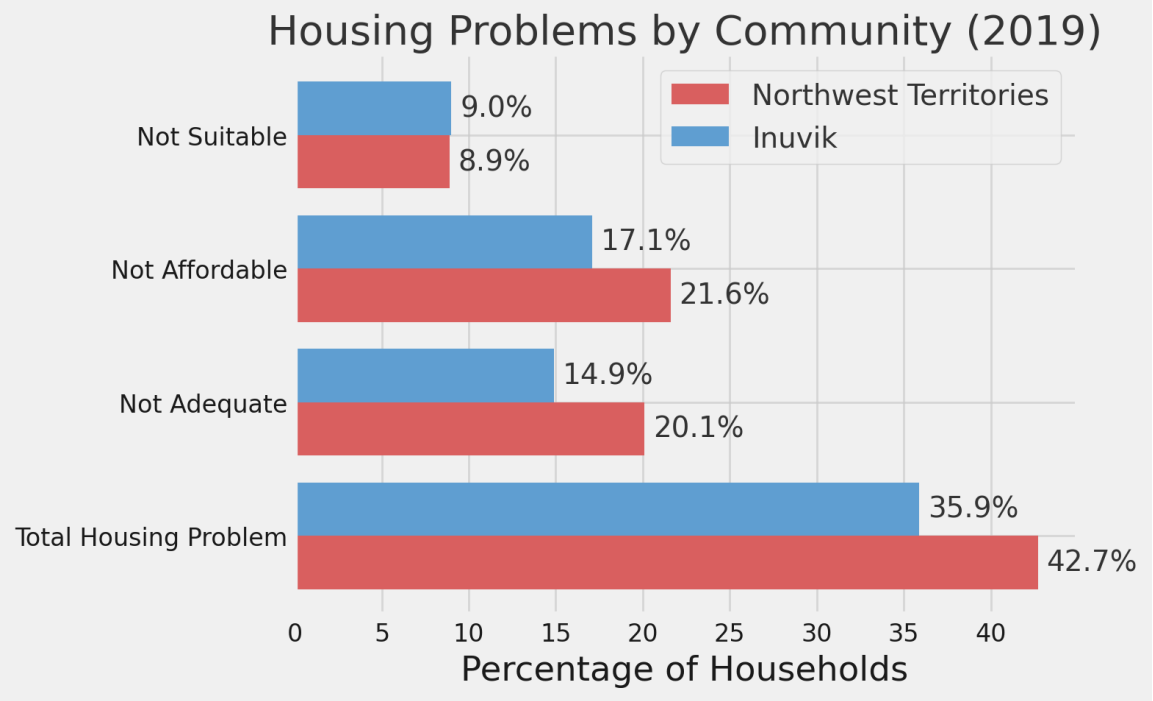
Housing Conditions

Inuvik has a higher proportion of homes requiring major or minor repairs (56.3%) compared to the territorial average of 52.5%. Meanwhile, 43.3% require regular maintenance. These conditions affect energy efficiency and affordability, with 53% of survey respondents citing cost as a primary barrier to making upgrades.



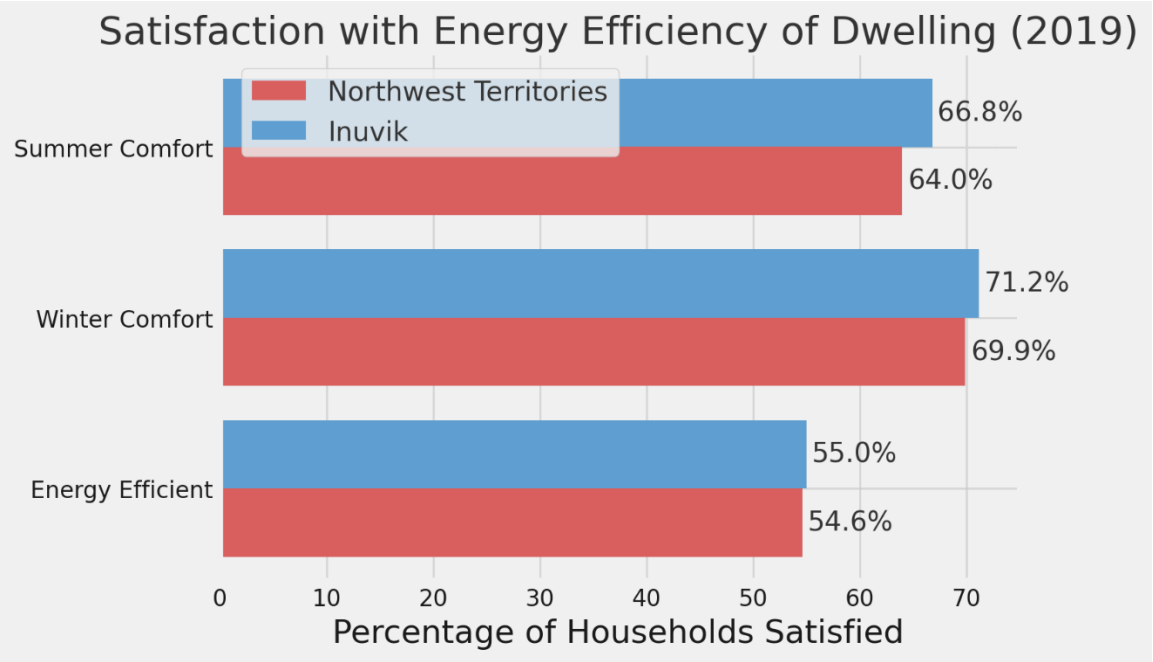
Data source: *NWT Bureau of Statistics (2019 NWT Community Survey).*

Housing problems affect 35.9% of Inuvik households, with 17.1% struggling with affordability, 14.9% living in inadequate housing, and 9.0% living in homes that are not suitable for their occupants. These figures highlight ongoing challenges in housing quality and affordability.



Data source: *NWT Bureau of Statistics (2019 NWT Community Survey).*

Energy efficiency satisfaction levels vary, with 55% of households satisfied overall. A majority of households (71.2%) feel their home maintains a comfortable winter temperature, while 66.8% report satisfaction with summer conditions. This suggests room for improvement in seasonal temperature management and energy efficiency.

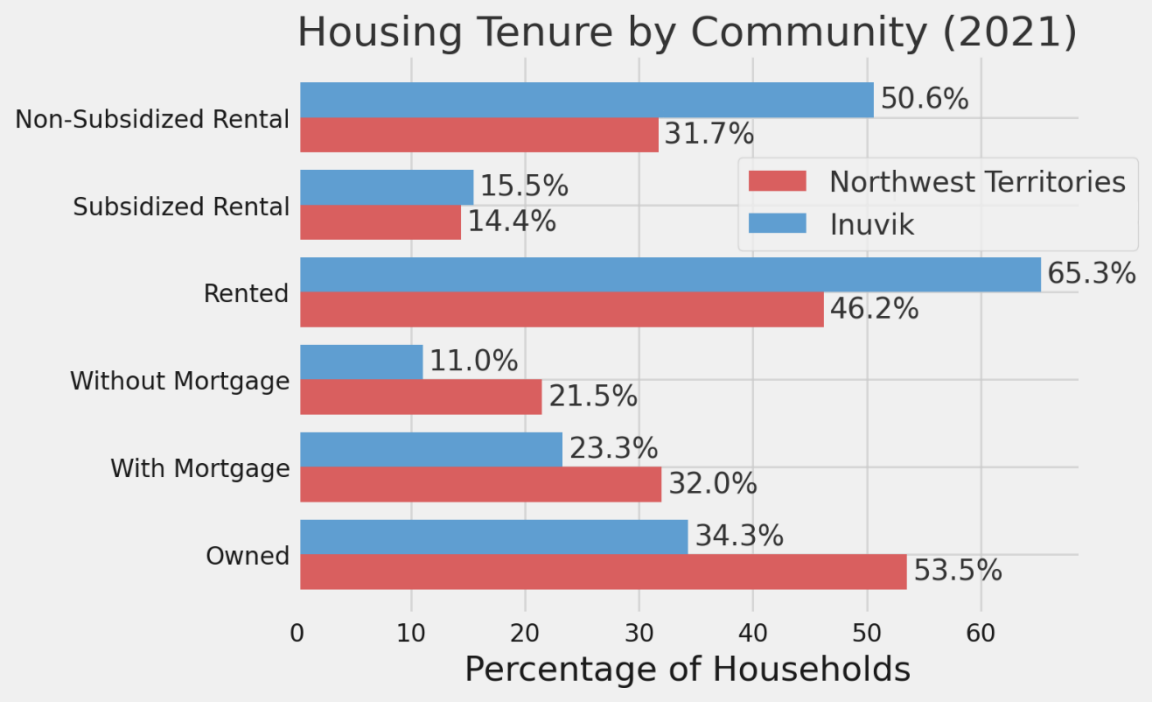


Data source: *NWT Bureau of Statistics (2019 NWT Community Survey).*

Housing Tenure

Housing tenure in Inuvik differs significantly from the Northwest Territories as a whole. Only 34.3% of homes in Inuvik are owned, compared to 53.5% across the territory. Renting is more common, with 65.3% of households renting—significantly higher than the 46.2% territorial average. Of these, 50.6% are non-subsidized rentals, indicating a high reliance on private rental housing.

Housing affordability and availability remain key concerns in Inuvik, particularly in the rental market. The CEP survey further supports this, with 44% of respondents identifying as renters, compared to 31% as homeowners and 19% living with family or friends. This highlights the need for increased housing support programs.



Data source: *NWT Bureau of Statistics (Statistics Canada, 2021 Census) and Inuvik CEP Survey (2024).*

Transportation

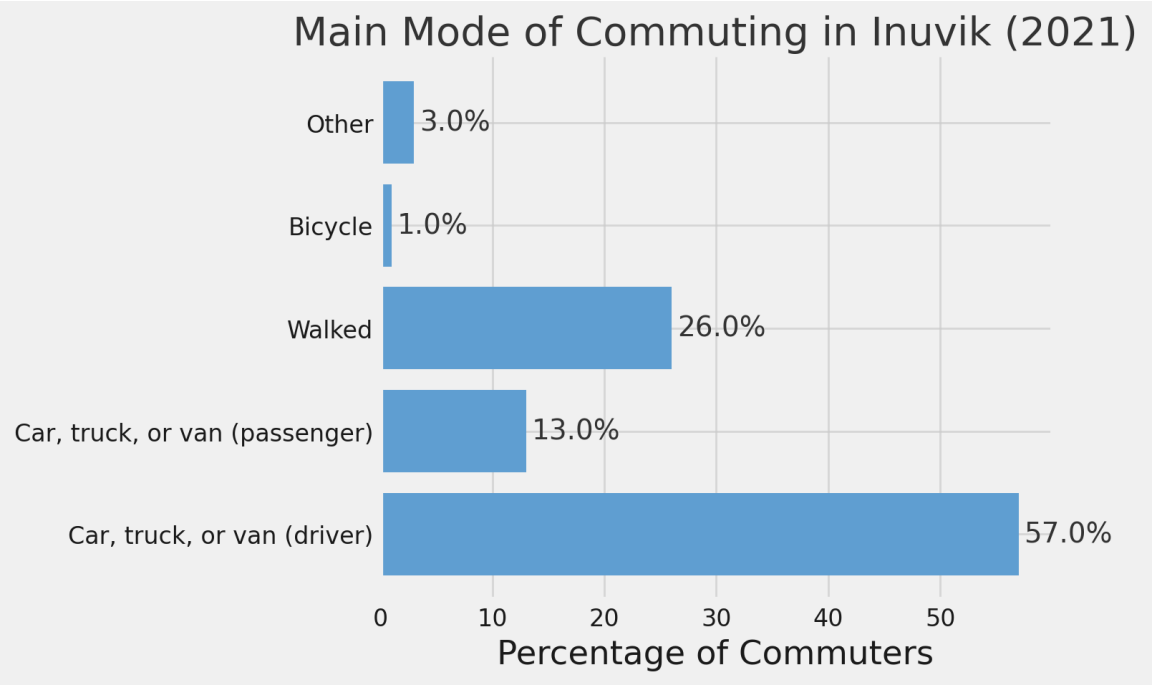
Inuvik's transportation trends show a heavy reliance on personal vehicles, with 70.3% of commuters using a car, truck, or van—57% driving alone and 13.3% commuting as passengers. Sustainable transportation accounts for 27% of commuting, with walking making up 26%. Public transit use is negligible, as Inuvik currently has no public bus system.

Carpooling remains limited, with only 7% of drivers sharing rides with one passenger and 1% having two or more passengers. Expanding ride-sharing initiatives and

alternative transit solutions could help reduce transportation-related energy consumption.

With over a quarter of residents relying on active transportation, improving pedestrian and cycling infrastructure would enhance accessibility and safety. Given the absence of public transit and low rates of carpooling, exploring community-led transit solutions or demand-based public transportation may reduce vehicle dependency and improve accessibility for residents.

Most commutes in Inuvik are short, with 88.3% taking less than 15 minutes. This highlights the compact nature of the community and the feasibility of promoting active transportation and shared mobility services.

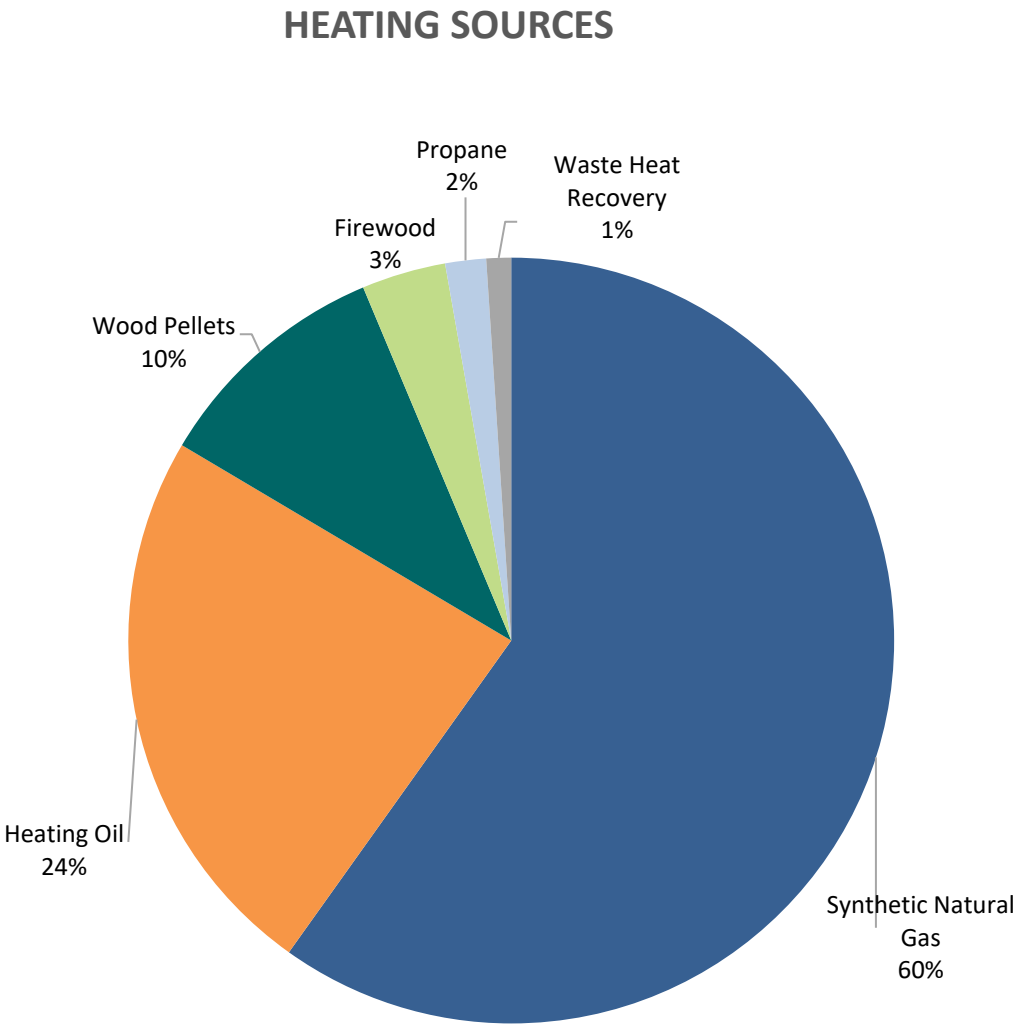


Data sources: *Statistics Canada, 2021 Census.*

Energy Profile

As of this writing, the most recent complete community energy profile is from 2018. While the 2023 profile is still in progress, some available data from 2023 has been included here.

Current Energy Sources



Natural gas / synthetic natural gas

Historically, the primary source of energy for Inuvik was natural gas extracted from the Ikhil reservoir, located 50 kilometers northwest of the town. However, declining reserves have necessitated a shift to synthetic natural gas (SNG). The remaining reserves are now used as a backup during road closures and emergencies. In 2023, the

community used 6,613,333 m^3 of natural gas/SNG for heating and 4,670,000 m^3 of natural gas/SNG for electricity generation.

Propane
Imported propane supplements Inuvik's energy needs. In 2023, the community used 268,000 litres of propane for heating.

Diesel
Diesel fuel remains a critical energy source, particularly for transportation and backup power generation. High transportation costs from southern Canada make diesel expensive and contribute significantly to GHG emissions. In 2023, the community used 3,200,000 litres of diesel for electricity generation. In 2018, the community used 4,030,000 litres of diesel for transportation. *(2023 diesel for transportation numbers have not been verified as of writing this energy plan.)*

Renewable energy
The current net metering policy set by the Northwest Territories Power Corporation (NTPC) includes a cap on the number of independent power producers that can connect a renewable electricity system to the grid. As Inuvik has already reached this limit, opportunities for additional renewable energy projects are constrained. Exploring options to adjust or expand this policy is critical for expansion of renewable energy projects.

Solar energy
Several municipal and residential solar panel installations exist, although their adoption is limited by initial costs, seasonal variations in sunlight and NTPC's net metering policy. In 2023, the community generated 438,000 kWh of electricity through the use of solar panels.

- In 2019, Nihtat Energy Ltd. (NEL) installed a 165-kW solar array beside NorthMart that supplies the store with electricity at a discounted rate.
- In 2019, NEL installed a 99-kW solar array near the Mackenzie Hotel that supplies the hotel with electricity at a discounted rate.
- In 2024 NEL commissioned a 1 MW solar array in the Inuvik industrial area that supplies power to NTPC under a Power Purchase Agreement.

Wind energy
The Inuvik High Point Wind Project, completed in 2023, features a 3.5-megawatt wind turbine located 12 kilometers east of the town. This turbine significantly reduces the community's diesel and natural gas consumption, reducing greenhouse gas emissions by about 6,000 tonnes per year. The project includes a battery energy storage system (BESS) that captures excess wind energy and ensures a consistent power supply during

low-wind periods. In 2023, the community generated an estimate of 3,100,000 kWh of electricity from the turbine installed in High Point.

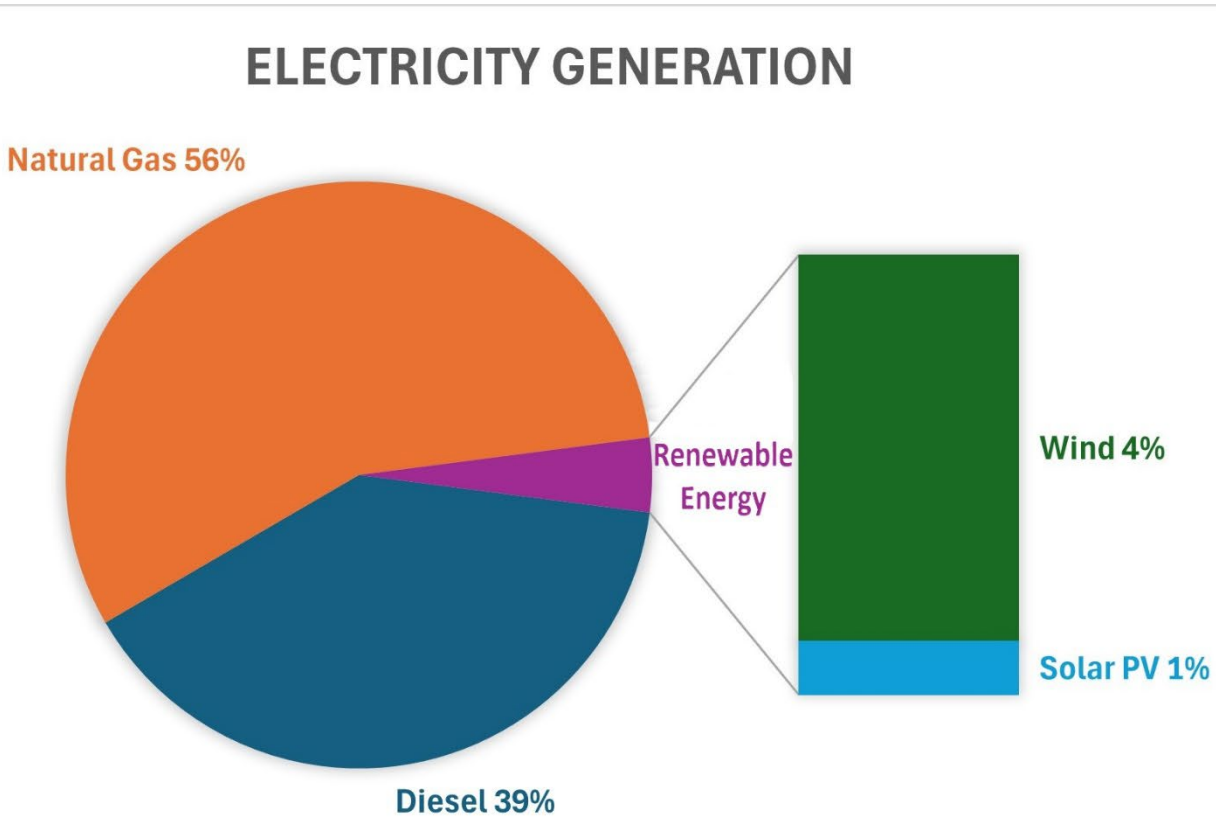
Biomass

Wood stoves and pellet stoves are used for residential heating and there are a few commercial pellet boilers in Inuvik, which handle a large portion of the heating load for commercial and institutional buildings. Inuvik also has one of the largest wood pellet storage facilities in the NWT, making it the hub of pellet distribution for the Beaufort–Delta region. In 2023, the community used 2,190 tonnes of wood pellets for commercial heating and 787 cords of firewood for residential heating.

- Since 2021 NEL has been installing commercial-scale wood pellet boilers in GNWT-owned buildings to supply a cheaper, sustainable alternative to fossil fuel heating.

Waste Heat Recovery

The Town of Inuvik and NTPC partnered to install a waste heat recovery system that captures excess waste heat produced by the diesel and natural gas generators at the power plant and uses it for space heating and pre-heating incoming water at the water treatment plant. In 2023, this waste heat recovery system provided 4,320,000 MJ of heating that would have otherwise been supplied by fossil fuels.

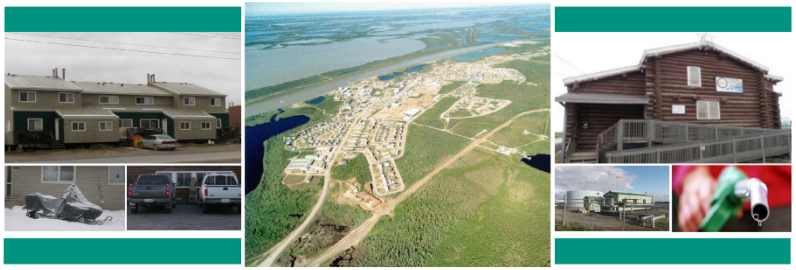


ENERGY PROFILE

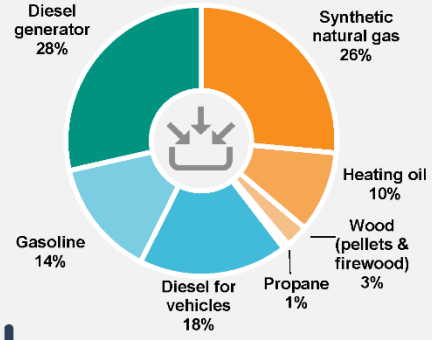
Where we get energy and how we use it

INUVIK 2018

Population: 3,441



Energy Sources – 1 Year



Diesel generator produces electricity and heat

37% electricity
62% waste heat
1% recovered heat

Energy cost

Total: $44,300,000

Cost per person: $12,900

44% diesel generator
18% synthetic natural gas
7% heating oil
1% wood pellets
1% firewood
1% propane
0.3% waste heat recovery
15% diesel for vehicles
13% gasoline

Renewable energy

3% of total energy
2% of total from firewood
1% of total from wood pellets
0.1% of total from solar PV

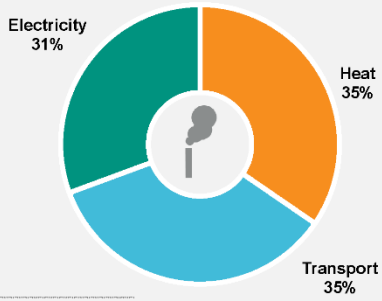
Unless otherwise noted, numbers reflect energy sources purchased or sourced in the community, and do not include industry or commercial transport. Percentages may not add to 100% due to rounding.

Greenhouse Gas (GHG) Emissions – 1 Year

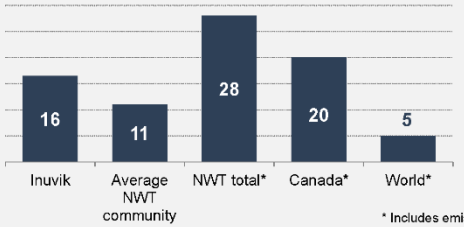
Community total GHG emissions per year

57,000 tonnes

16 tonnes/person

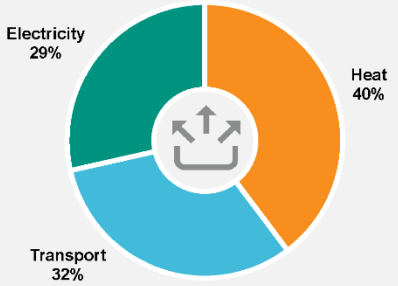


Average tonnes of GHGs per person per year



* Includes emissions from industry and commercial transport.

Energy Use – 1 Year



Energy use in homes

19% of total energy use
28% of total electricity
70% of total natural gas
100% of total firewood
20% of total wood pellets

Energy use in other buildings

Store, school, church, office, arena, library, etc.

23% of total energy use
72% of total electricity
30% of total natural gas
100% of total heating oil
80% of total wood pellets
100% of total propane
100% of total waste heat recovery

Transport (local – no air transport)

Cars, trucks, boats, ATVs, skidoos, etc.

32% of total energy use

Fuel purchased in the community.

Waste energy

From electricity production and heating

26% of total energy use

ARCTIC ENERGY ALLIANCE
Revised: September 2020

ENERGY PROFILE
INUVIK 2018

EXTRA INFO

What's a megajoule (MJ)?

A joule is a unit of energy. A megajoule is 1 million joules.

Some examples:

- 1 BBQ propane tank = 500 MJ
- 1 kWh = 3.6 MJ
- 1 L of heating oil = 38.4 MJ
- 1 L of propane = 26.6 MJ
- 1 tonne of wood pellets = 19,200 MJ
- 1 cord of wood = 18,700 MJ

What's waste energy?

When fuels are burned, some of their energy is released as heat that can't be used. The amount of energy that an appliance or device can use is called its efficiency. For example:

Diesel generators can usually only convert 25–35% of the diesel's energy to electricity, while 65–75% is released as heat.

Furnaces, boilers, wood stoves and other heating applicances can use anywhere from 70% to more than 95% of the heat they produce. The rest is released up the chimney.

Energy sources

Diesel generator
- 28% of total energy
- Cost: $19,500,000
- Amount: 6,460,000 Litres
- GHGs: 17,400 tonnes
- Energy: 248,000,000 MJ

Synthetic natural gas
- 26% of total energy
- Cost: $8,140,000
- Amount: 230,000 GJ
- GHGs: 13,300 tonnes
- Energy: 230,000,000 MJ

Diesel for vehicles
- 18% of total energy
- Cost: $6,450,000
- Amount: 4,030,000 Litres
- GHGs: 11,000 tonnes
- Energy: 155,000,000 MJ

Gasoline
- 14% of total energy
- Cost: $5,790,000
- Amount: 3,630,000 Litres
- GHGs: 8,920 tonnes
- Energy: 122,000,000 MJ

Heating oil
- 10% of total energy
- Cost: $3,190,000
- Amount: 2,200,000 Litres
- GHGs: 5,920 tonnes
- Energy: 84,500,000 MJ

Firewood
- 2% of total energy
- Cost: $413,000
- Amount: 787 Cords
- GHGs: 26 tonnes
- Energy: 14,700,000 MJ

Wood pellets (commercial)
- 1% of total energy
- Cost: $285,000
- Amount: 475 tonnes
- GHGs: 16 tonnes
- Energy: 9,120,000 MJ

Propane
- 1% of total energy
- Cost: $331,000
- Amount: 228,000 Litres
- GHGs: 351 tonnes
- Energy: 6,060,000 MJ

Wood pellets (residential)
- 0.3% of total energy
- Cost: $83,000
- Amount: 125 tonnes
- GHGs: 4 tonnes
- Energy: 2,400,000 MJ

Solar PV
- 0.1% of total energy
- Cost: $0
- Amount: 180,000 kWh
- GHGs: 0 tonnes
- Energy: 647,000 MJ

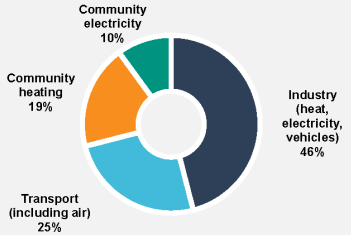
Waste heat recovery
- 0% of total energy
- Cost: $146,000
- Amount: n/a
- GHGs: 0 tonnes
- Energy: 2,510,000 MJ

Total community energy use

- **872,100,000 MJ**
- 250,000 MJ/person

Total NWT energy use (2017)

Total: 20 billion MJ/year



The AEA has tried to ensure our data is as accurate as possible, but there could be mistakes. If something seems incorrect, please contact us to let us know.

References

Energy source and use data: Private suppliers and utilities, and the Government of the Northwest Territories Bureau of Statistics and Department of Infrastructure.

GHG emissions data: https://www.cer-rec.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/nt-eng.html
https://ourworldindata.org/grapher/co-emissions-per-capita?tab=chart&country=AUS+CAN+USA+OWID_WRL

Connecting the 2010 Energy Plan to the Present

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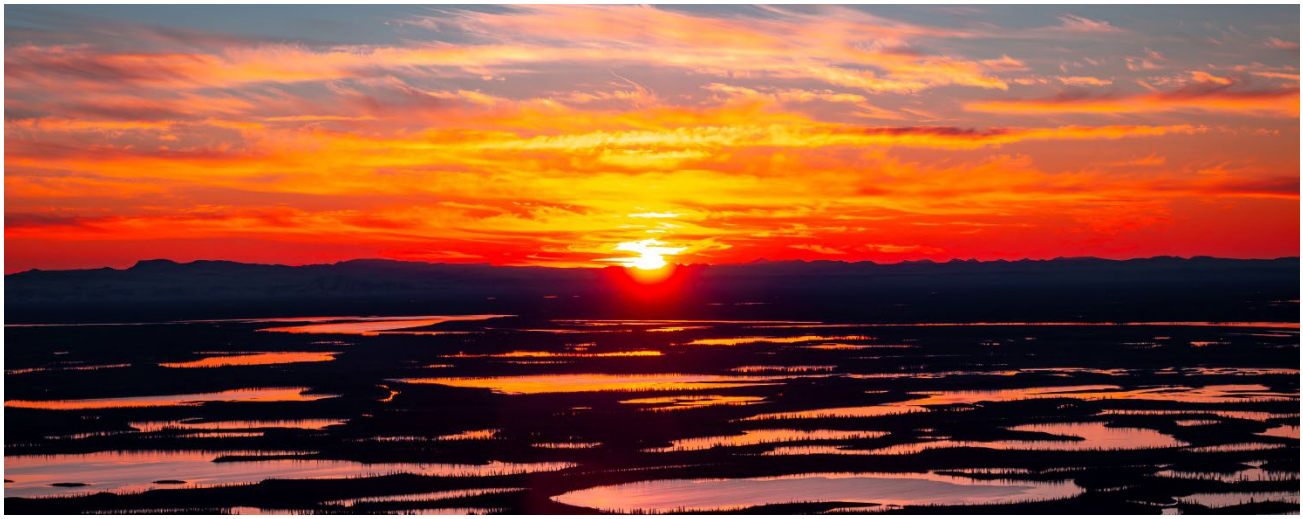


In 2010, the Town of Inuvik developed a Community Energy Plan (CEP) to reduce energy consumption and greenhouse gas (GHG) emissions throughout the community. The 2010 CEP defined the community's long-term goals for energy use and GHG emissions, outlined strategies for meeting those goals and recommended actions to move the strategies forward.

The 2010 CEP had four components:

1. A community profile
2. A vision
3. Goals, strategies and suggested actions
4. Next steps

Since the development of the 2010 CEP there has been large-scale adoption of energy conservation, energy efficiency, and renewable energy technology in Inuvik. New developments around Inuvik have been completed with active transportation and walkability in mind, and the town has been improving its current walking and biking infrastructure. Organizations and residents have been retrofitting their buildings with energy-efficient products such as LED lighting, wood stoves and pellet stoves, ECM (Electronically Commutated Motor) pumps, condensing boilers and tankless water heaters, and reducing their heat loss by increasing insulation levels and eliminating air leakage.

[3]Photo by Kristian Binder

There has also been large-scale adoption of renewable energy technologies such as a 3.5 MW wind turbine, numerous solar installations around town varying in size from residential up to utility scale, multiple commercial-size pellet boilers, one of the NWT's largest pellet storage facilities, a utility-scale battery energy storage system, and a waste heat recovery system that uses excess heat from the power plant's generators to provide space heating for the water treatment plant and temper the incoming raw water. Inuvik has developed into a town with a culture that values energy efficiency, conservation, and sustainability.

There have been several publications addressing energy security, energy independence, and energy literacy within the Beaufort–Delta region such as:

Inuvialuit Settlement Region Energy Action Plan

The Inuvialuit Settlement Region (ISR), located in the Western Canadian Arctic, is home to around 6,000 people across six communities. The Inuvialuit Final Agreement was established in 1984, leading to the creation of the Inuvialuit Regional Corporation (IRC), which aims to improve the economic, social, and cultural well-being of the Inuvialuit.

The IRC is focused on achieving energy security and independence by creating a tailored energy plan for the region that addresses unique community needs and promotes sustainable, affordable energy. The ISR *Energy Action Plan* is based on community engagement and identifies five thematic areas for action: capacity and engagement, technology, environmental impact, energy cost, and education and energy literacy. Implementation of the plan will vary by community, reflecting local priorities and needs, while improving energy security and socio-economic benefits for the Inuvialuit.

More details can be found in the ISR *Energy Action Plan*, available online at: https://irc.inuvialuit.com/documents/inuvialuit-settlement-region-energy-action-plan/

Inuvialuit Energy Security Project

The Inuvialuit Petroleum Corporation (IPC) is proposing to develop the M-18 well with the construction of a gas plant that will produce natural gas and synthetic diesel, which can then be transported to customers for power and heating applications. This project is intended to:

- Provide a replacement to the diminished Ikhil gas well
- Reduce the region's reliance on expensive southern fuel and exposure to intermittent road outages
- Create opportunities for local businesses
- Mitigate the high costs of living and doing business in the region

The project will lead to:

- Energy security: The project will result in a supply of local natural gas for the region for decades to come.
- Economic benefits: The project will result in good quality, permanent jobs for residents and cost savings on heating and fuel.
- Environmental benefits: The project will reduce transportation-related GHG emissions by thousands of tonnes each year.

More information can be found online at: https://irc.inuvialuit.com/inuvialuit-energy-security-project/

Inuvialuit Settlement Region Climate Change Strategy

Inuvialuit communities have expressed deep concerns about climate change, including impacts such as shifting ice patterns, species migration, coastal erosion, and health effects. These changes are expected to intensify as temperatures rise, threatening both the tangible and intangible aspects of Inuvialuit culture and wellness. Addressing climate change through mitigation, adaptation, and resilience is critical, with a focus on incorporating Inuvialuit priorities, cultural values, and Traditional Knowledge in climate solutions. The *ISR Climate Change Strategy* is based on community engagement and identifies six thematic areas for action: food and wellness, safety, housing and infrastructure, education and awareness, ecosystem health and diversity, and energy. Collaboration with various government and non-government entities, as well as alignment with broader Inuit climate strategies, is essential for advancing these goals and actions in the ISR.

More details can be found in the ISR Climate Change Strategy available online at: https://irc.inuvialuit.com/wp-content/uploads/2023/10/ISR_Climate_Change_Strategy.pdf

IRC's Department of Innovation, Science, and Climate Change Terminology Project

Climate change impacts to arctic environments has sparked an unprecedented growth in climate change research being conducted in arctic communities across the globe. This growth in research has resulted in increasingly more sophisticated and specialized terminology being used in climate change discourse. As a direct result of this advancement in scientific terminology, climate change information relayed to Inuvialuit Settlement Region (ISR) communities has become increasingly difficult to comprehend, both conceptually and linguistically. Consequently, the gap between Traditional Knowledge (TK) and the scientific community has continued to increase over time, creating an unfortunate disconnect between researchers, politicians and ISR community members.

Sallirmiutun, Uummarmiutun, and Kangiryuarmiutun, collectively known as the Inuvialuktun language, are the three dialects spoken in the ISR. The Inuvialuktun language is spoken by fewer than 50 per cent of the population, many of whom are Elders. As the "true" holders of TK, Elders are often interviewed for numerous research and oral history initiatives/projects.

More information can be found in the ISCC Terminology Report which is available online at: https://irc.inuvialuit.com/wp-content/uploads/2024/07/Translations-from-Climate-Change-Energy-and-Science-Terminology-Workshops-ISCC-April-2024.pdf

Arctic Energy Alliance & Gwich'in Tribal Council's Energy Wordbook Project

The "Energy Wordbook" is a resource created to help communicate energy-related concepts in the Gwich'in language, Dinjii Zhuh Ginjik, spoken in the Northwest Territories. The terminology was developed through a workshop with language experts, speakers, and linguists, and serves as a tool for learning and communication. The book is not an exhaustive list of terms, as other terminology may also exist. It was created by the Arctic Energy Alliance in partnership with the Gwich'in Tribal Council, based on the terminology developed in a Gwich'in Energy Terminology Workshop. The terminology belongs to the Gwich'in people, not the Arctic Energy Alliance.

There is also a card game that can be used in schools and various events to incorporate an interactive element to the learning process

The Energy Wordbook and card game are in the final stages of publication, though they have not yet been finalized at the time of writing this energy plan.

Nihtat Gwich'in Council's Energy Strategy

Nihtat Energy Ltd. is in the final stages of developing an energy strategy, though it has not yet been published at the time of writing this energy plan.

Methodology

The Town of Inuvik partnered with the Arctic Energy Alliance to develop a CEP. This section describes the approach and methodology used in the project.

Community Energy Champion

The Town of Inuvik (TOI) hired a Community Energy Champion (CEC)—a dedicated individual responsible for coordinating the CEP process.

Role & Responsibilities

The Community Energy Champion served as a vital link between the community, AEA, and local leadership. Their primary responsibilities included:

- Coordinating community energy initiatives and ensuring alignment with the CEP's goals.
- Engaging with residents, businesses, and stakeholders to raise awareness and gather input.
- Facilitating surveys, workshops, and outreach activities to promote participation.
- Providing a local point of contact for energy-related inquiries and concerns.
- Supporting data collection efforts to ensure the CEP is informed by accurate and representative information.

Capacity Building

A core objective of this project was to build local capacity for energy leadership. To ensure the Community Energy Champion was well-equipped for the role, AEA organized a three-day orientation workshop in Yellowknife. This workshop covered The CEP process and education around energy management.

Beyond the initial training, AEA provided ongoing support, education and mentoring throughout the process. The TOI administration also played a key role in supporting the CEC, ensuring they had the necessary tools to succeed.

Community Engagement

Community engagement was built on open communication, active participation, and mutual respect between organizations, individuals, and the broader community. These engagements aimed to discuss the Community Energy Plan (CEP) and the community survey while gathering valuable input from residents and stakeholders.

Public Engagement Events

A variety of engagement events were held to ensure broad community participation:

- **Community Energy Fair** – Hosted at the Inuvik Library, this event provided an opportunity for residents to learn about the Community Energy Plan and share their thoughts.
- **School Visit** – A presentation and discussion with students from Grades 7–12 at East Three Secondary School, engaging youth in the energy planning process.
- **Bertha Allen Apartments** – A dedicated session with Elders to gather their perspectives on energy use and sustainability.
- **NorthMart Pop-Up Sessions** – Informal engagement sessions at NorthMart helped increase survey participation and connect with residents in a more accessible setting.

Meetings with Key Stakeholders

Engagement also involved discussions with key organizations and community leaders, including:

- **Leadership Meeting** – Held at the Mackenzie Hotel, this meeting focused on the vision statement, energy goals and energy strategies.
- **Gwich'in Tribal Council** – Project coordinator.
- **Inuvialuit Regional Corporation** – Clean Energy Program Coordinator, Innovation, Inuvialuit Science and Climate Change.
- **Inuvik Native Band** – Chief and Council.
- **Nihtat Gwich'in Council** – President and Executive Director.
- **Town of Inuvik** – Mayor, SAO, Councillors and various staff.
- **Aurora Research Institute** – Manager, Applied Energy Research Programs and Director, Western Arctic Research Centre.

Other Engagement

Other activities included**:**

- A power plant tour, wind turbine tour and discussion with NTPC staff.
- Various drop-in discussions with community members, local organizations, and businesses to ensure broad participation in the planning process.

Feedback Mechanisms

To ensure community input was effectively integrated into the CEP, several mechanisms were used:

- **Survey data analysis** to identify trends, priorities, and key concerns from community responses.
- **Meeting summaries and reports** capturing key discussions and action points.
- **Iterative plan revisions**, incorporating feedback at different stages of development.
- **Ongoing communication**, ensuring that residents were informed about progress and how their input was used.

Through this engagement process, the CEP was shaped by those who will be most affected by its outcomes, ensuring that it is a practical and community-driven roadmap for the future of energy in Inuvik.

Community Energy Planning Survey

The community energy planning survey played a crucial role in capturing residents' perspectives on energy use, housing, and community priorities. The survey was designed to be accessible and representative of the broader population, ensuring that the Community Energy Plan (CEP) reflects local needs.

Survey Design & Distribution

The survey was developed collaboratively by AEA and the Community Energy Champion (CEC) using Microsoft Forms. A variety of distribution methods were used:

- **Email distribution** to local organizations.
- **Posters around town** featuring a QR code for easy access.
- **Business cards with QR codes** handed out at engagement events.
- **Community newsletter** promotions.
- **Social media campaigns** to reach a wider audience.
- **Paper copies** distributed for those without internet access.

Response Rate & Representativeness

The survey received **160 responses** in total, with participation across different age groups:

- 136 responses from individuals over 18 years old.
- 24 responses from individuals under 18 years old.

Among adult respondents, **50%** were renters, making it the most common housing situation, **34%** were homeowners and **11%** lived with family or friends. A small number of respondents resided in shelters or care facilities.

Household Size

- Nearly half of all adult respondents live in households with four or more people.
- 28% (38 respondents) of adult respondents lived in two-person households.
- 18% (24 respondents) lived alone, highlighting a notable percentage of single-person homes.

This highlights the importance of tailoring energy policies and efficiency programs to meet the needs of both smaller and larger households, ensuring affordability and sustainability for all residents.

Insights from the Community Energy Planning Survey

The survey responses reveal a strong community interest in transitioning to more sustainable and affordable energy solutions, while ensuring that all residents benefit from these changes. Renewable energy projects like solar, wind, and geothermal were frequently mentioned as promising solutions, but concerns exist over high upfront costs, lack of incentives, and infrastructure limitations.

Many respondents expressed frustration with the declining availability of energy rebates and financial support for home retrofits, making it difficult for individuals to invest in energy efficiency. There was also concern that energy policies primarily benefit homeowners, leaving renters and lower-income residents with fewer options to participate in energy-saving programs. Some participants emphasized the importance of local energy independence, suggesting that Inuvik should seek alternatives to power providers like NTPC, explore community-owned energy projects, and improve energy storage capacity.

In addition to energy production, several responses highlighted alternative transportation initiatives as a way to reduce emissions and promote sustainability. One suggestion was to develop a “bike all winter” program, where residents could receive free winter bike tires and installation to encourage cycling as an alternative to driving in the winter months, when idling vehicles consume large amounts of fuel. Another idea was to promote active transportation through a themed community event, rewarding residents who share their efforts to walk or bike instead of drive.

Barriers to increasing home energy efficiency among adults in the Inuvik CEP Survey.

- **Renters face major barriers** – Many respondents do not own their home, meaning they have limited ability to make energy-efficient upgrades.
- **Financial constraints** – Cost is a significant factor preventing people from improving energy efficiency.
- **Lack of contractor availability and knowledge** – A notable number of respondents lack access to skilled contractors or information about energy-saving options.

This suggests that incentives for landlords and tenants/renters, educational resources, and improved contractor availability could help overcome these barriers.

Barriers to renewable energy adoption in the Inuvik CEP Survey.

- **High upfront cost** is the biggest challenge, making renewable energy unaffordable for many.
- **Lack of incentives and subsidies** prevents homeowners from justifying the investment.
- **Limited contractor availability** makes installation difficult.
- **Cold weather is a concern for some technologies**, particularly EVs and battery storage.
- **Grid connection limits** restrict renewable expansion.
- **The intermittent nature** of most available renewable energy sources in Inuvik is also a barrier.

This suggests that financial incentives, contractor training, and updating the net metering policy could help overcome these barriers.

Barriers to reducing reliance on imported fuel:

Many barriers to renewable energy, like high upfront costs and grid restrictions, also hinder efforts to reduce reliance on imported fuel. Additional challenges include the lack of affordable local heating alternatives, such as limited availability of wood pellets and local natural gas. Without viable substitutes, residents remain dependent on expensive imported fuels for heat and electricity.

Key priorities identified by the community:

- **Affordable renewable energy:** More financial support for solar, wind, and geothermal energy projects, especially for renters and lower-income residents.
- **Energy education & conservation:** Expanded home energy audits, efficiency workshops, and accessible energy-saving strategies for all residents.
- **Infrastructure & incentives:** Calls for increasing rebates, improving contractor availability, and increasing the net metering cap.

- **Local energy solutions:** Interest in community-owned power initiatives, battery storage systems, and alternatives to NTPC's current energy model.
- **Sustainable transportation:** Proposals for a winter cycling incentive program, active transportation awareness campaigns, and pedestrian-friendly infrastructure.
- **Sustainable urban planning:** Proposals for better building insulation, improved recycling programs, and enhanced pedestrian-friendly infrastructure.

Overall, the responses highlight a strong demand for community-driven, equitable, and cost-effective energy solutions. Residents want more input in decision-making, greater financial accessibility for energy upgrades, and long-term policies that ensure affordability and sustainability for all.

Data Collection & Analysis

Data collection utilized multiple sources to ensure a comprehensive understanding of Inuvik's energy landscape. Key data sources included **NWT Bureau of Statistics** and **Statistics Canada.**

Energy Profile Data

Energy consumption and supply data was gathered from suppliers and NTPC.

Development of the Community Energy Plan

The CEP was developed through an iterative process that incorporated community feedback, data analysis, and strategic planning.

Vision, Goals, and Strategies

Based on the insights gathered through surveys, engagement events, and stakeholder meetings, a vision statement and five key goals were identified. Each goal was further broken down into specific strategies to guide implementation.
The draft vision, goals, and strategies were presented to community leadership for review and discussion. Feedback from these discussions led to amendments and refinements, ensuring that the plan aligned with community priorities and was practical for implementation.

Action Plan Development

Following the finalization of goals and strategies, an **action plan** was created. This included:

- **Identifying actions** based on feasibility and impact.
- **Assigning responsibilities** to different organizations and stakeholders.
- **Developing a timeline** for implementation.

The final Community Energy Plan represents a collaborative effort, ensuring that the community's energy future is shaped by those who live and work in Inuvik. This process has established a strong foundation for continued engagement, accountability, and action.

Vision Statement

This vision statement reflects the community's values and outlines its aspirations for the future. It serves as a guiding framework for achieving the community's goals and shaping the implementation of key strategies.

Vision Statement

"We will build a sustainable, resilient, and self-reliant community powered by local natural gas, clean renewable energy and local resources. We will reduce reliance on imported fuels, lower energy costs, and enhance energy security for future generations."

Energy Goals

The community energy planning goals are rooted in the community's values and are designed to be achievable. They provide a clear and practical path for the community to work together toward a sustainable energy future.

Energy Goals

1. Improve energy efficiency in buildings and infrastructure
2. Reduce transportation-related emissions
3. Expand the use of renewable energy
4. Reduce dependency on imported fuel
5. Enhance community energy literacy and workforce capacity

Energy Strategies

Energy strategies outline the practical steps needed to achieve the community's energy goals. By combining technical solutions, policy support, and community-driven initiatives, these strategies ensure that energy planning aligns with local priorities and long-term sustainability. Effective implementation requires collaboration among residents, businesses, and leadership to create lasting benefits for the community.

1) Enhance energy efficiency in buildings and community infrastructure

Strategies:

a) Promote energy-efficient building standards for new buildings.
b) Retrofit public buildings to improve energy efficiency.
c) Support cost-effective, energy-efficient upgrades for homes and commercial buildings.
d) Promote Sustainable land use and community planning.

2) Reduce transportation-related emissions

Strategies:

a) Assess and promote the feasibility of electric and hybrid vehicles in Inuvik.
b) Evaluate sustainable public and municipal transportation solutions.
c) Promote the installation and use of Integrated Parking Lot Controllers (IPLCs) to optimize energy use for vehicle heating.
d) Encourage active transportation.

3) Expand the use of renewable energy

Strategies:

a) Advocate for changes to enable greater renewable energy integration.
b) Maximize wind power utilization and grid efficiency.
c) Increase solar energy adoption.
d) Expand the use of biomass for heat and power generation.

4) Reduce dependency on imported fuel

Strategies:

a) Integrate the Inuvialuit Energy Security Project (IESP) into the region's energy infrastructure to replace the Ikhil wells with gas from the M-18 well.
b) Strengthen local food security.
c) Expand the use of locally sourced biomass.
d) Explore alternative clean energy options.

5) Enhance community energy literacy and workforce capacity

Strategies:

a) Educate residents about energy-saving measures, renewable energy options and available incentives.
b) Foster engagement and energy education for children and youth.
c) Build educational and training opportunities for youth.
d) Improve education for local contractors on installing and maintaining renewable energy systems.
e) Expand access to Wood Energy Technology Transfer (WETT) certification and services in Inuvik.
f) Foster a culture of energy conservation and environmental stewardship.

Energy Action Plan

The Action Plan provides a clear roadmap for implementing the community's energy strategies. It outlines specific initiatives, timelines, and responsibilities to ensure progress toward energy goals. The plan includes short-term, medium-term, and long-term actions, focusing on practical solutions such as energy efficiency upgrades, renewable energy projects, policy development, and community education. By defining measurable steps and assigning accountability, the Action Plan transforms strategic goals into tangible outcomes, driving meaningful change for the community.

GOAL 1: IMPROVE ENERGY EFFICIENCY IN BUILDINGS AND INFRASTRUCTURE

Strategy	Actions	Timeline	Who is responsible?[4]
Promote energy-efficient building standards for new buildings	Promote AEA's Guide for New Energy Efficient Buildings	Ongoing	AEA
	Consider amending the Town's zoning bylaw to set minimum energy efficiency standards for new buildings	Short-term	TOI
	Assess the feasibility of a net-zero housing development program	Long-term	IRC
Retrofit public buildings to improve energy efficiency	Complete outstanding energy management opportunities (EMOs)—see Appendix 4	Ongoing	TOI
	Complete targeted energy audits on all public buildings	Mid-term	TOI
Support cost-effective, energy-efficient upgrades for homes and commercial buildings	Encourage energy audits for homes and commercial buildings to identify cost-effective upgrades	Ongoing	AEA TOI
	Increase awareness of AEAs home energy evaluation service	Ongoing	AEA
	Promote rebate programs for energy upgrades	Ongoing	TOI
	Develop home & business retrofit programs	Immediately	TOI, AEA, IRC
	Implement home winterization programs	Yearly	IRC, AEA, TOI, NGC
Promote Sustainable land use and community planning	Encourage mixed-use developments	Ongoing	TOI
	Prioritize compact development within existing municipal boundaries	Ongoing	TOI
	Encourage infill development to maximize existing infrastructure	Ongoing	TOI

[4] See Appendix 2 – Acronyms.

GOAL 2: REDUCE TRANSPORTATION-RELATED EMISSIONS

Strategy	Actions	Timeline	Who is responsible?
Assess and promote the feasibility of electric and hybrid vehicles in Inuvik	Assess the feasibility of charging infrastructure	Ongoing	AEA, CEC
	Educate residents about electric vehicles (EVs), including their benefits, challenges, and operational considerations in extremely cold climates; highlight hybrid vehicles as a potential alternative for long journeys where charging infrastructure is limited.	Ongoing	AEA, CEC
	Monitor EV advancements for extremely cold climates	Ongoing	AEA, TOI, ARI
Evaluate sustainable public and municipal transportation solutions	Consider the feasibility of introducing an electric school bus	Mid-term	NGC
	Consider piloting an EV in the municipal fleet	Mid-term	TOI
	Explore the feasibility of a community bus system or shuttle service.	Mid-term	TOI
Promote the installation and use of Integrated Parking Lot Controllers (IPLCs) to optimize energy use for vehicle heating	Advertise/educate the benefits of installing IPLCs	Ongoing	TOI, AEA
	Investigate/integrate possible municipal exchange programs	Immediate	TOI
	Promote rebate program for IPLCs	Ongoing	AEA
Encourage active transportation	Expand and maintain multi-use trails	Mid-term	TOI
	Ensure safe and accessible bicycle and pedestrian infrastructure is integrated into all new road construction, repairs, and upgrades	Ongoing	TOI
	Consider community bike programs to encourage summer and/or winter biking	Short-term	TOI
	Install additional bike racks at public buildings	Short-term	TOI

GOAL 3: EXPAND THE USE OF RENEWABLE ENERGY

Strategy	Actions	Timeline	Who is responsible?
Advocate for changes to enable greater renewable energy integration	Lobby the Government of the Northwest Territories to revise the NTPC net-metering policy and increase the cap for grid-tied renewables	Ongoing	Community leadership
	Collaborate with community organizations to build a case for net metering expansion	Short-term	Community leadership
Maximize wind power utilization and grid efficiency	Explore the feasibility of integrating a smaller generator to complement the wind turbine during periods of low wind generation	Mid-term	NTPC
	Expand battery energy storage systems to capture excess wind power and improve grid reliability	Mid-term	NTPC
	Explore potential uses for overproduction	Short-term	NTPC
	Enhance operational efficiency of the NTPC power plant to maximize wind power generation and minimize the use of imported gas and diesel	Ongoing	NTPC
	Upgrade the power plant operating software to automate generator start-up and shutdown, maximizing efficiency and reducing fuel consumption	Short-term	NTPC
Increase solar energy adoption	IRC's Solar program	Short-term	IRC
	Increase awareness of AEA's Alternative Energy Technologies Program	Ongoing	AEA
	Explore potential uses for solar overproduction	Short-term	TBD
Expand the use of biomass for heat and power generation	Promote the adoption of high-efficiency biomass stoves and boilers for residential and commercial heating through incentives and education programs	Ongoing	AEA
	Investigate sustainable biomass supply chains to ensure affordability and long-term availability	Mid-term	NGC

GOAL 4: REDUCE DEPENDENCY ON IMPORTED FUEL

Strategy	Actions	Timeline	Who is responsible?
Integrate the Inuvialuit Energy Security Project (IESP) into the region's energy infrastructure to replace the Ikhil wells with gas from the M-18 well	Provide regular project updates to community members	Ongoing	IRC
	Collaborate with stakeholders to ensure a smooth transition	Ongoing	IRC
	Develop the IESP Energy Centre, which will process natural gas into compressed natural gas and synthetic diesel	Mid-term	IRC
Strengthen local food security	Expand community greenhouse initiatives where possible	Ongoing	CGSI
	Support traditional harvesting programs	Ongoing	NGC, ICC, INB, TOI, CGSI
	Support local food businesses and markets	Ongoing	TOI, CGSI
Expand the use of locally sourced biomass	Implement AEA's Firewood Access Project	Short-term	AEA, TBD
	Assess the feasibility of using locally harvested wood chips as a renewable fuel source for heating and/or power generation	Mid-term	GTC
Explore alternative clean energy options	Consider clean energy feasibility studies (such as geothermal, run-of-river hydro, and small or medium-sized wind turbines)-	Periodic	IRC, ARI, TOI
	Establish cleaner energy projects that reduce dependence on expensive imported fossil fuels and create sustainable, secure work opportunities for local community members and businesses	Ongoing	IRC

GOAL 5: ENHANCE COMMUNITY ENERGY LITERACY AND WORKFORCE CAPACITY

Strategy	Actions	Timeline	Who is responsible?
Educate residents about energy-saving measures, renewable-energy options and available incentives	Increase the availability of educational materials related to clean energy	Ongoing	AEA, IRC
	Expand the existing Inuvialuktun Energy & Climate Change Terminology Glossary	Short-term	IRC
	Produce and release Gwich'in *Energy Wordbook*, video and card game	Short-term	AEA, GTC
Foster engagement and energy education for children and youth	Publish Inuvialuit Energy & Climate Children's Book Series	Immediate	IRC
	Develop clean energy science units in K–12 Curriculum	Sort-term	IRC, BDEC
	Conduct annual classroom visits to engage students in energy conservation, renewable energy, and sustainable practices	Ongoing	IRC, AEA
Build educational and training opportunities for youth	IRC's Energy Literacy program	Short-term	IRC
	Powered By Youth Group – discussion group	Ongoing	IRC
	Develop, implement and facilitate energy-driven STEM programs for youth	Short-term	IRC
	Advocate for and provide youth and "training on the job" employment opportunities	Near-term	IRC
Improve education for local contractors on installing and maintaining renewable energy systems	Host training workshops for solar panel installation & maintenance	Mid-term	IRC
	Provide technical training and career building programs	Short-term	IRC
	Expand college course offerings	Ongoing	Aurora College
Expand access to Wood Energy Technology Transfer (WETT) certification and services in Inuvik	Support ongoing WETT training opportunities	Ongoing	TBD
	Collaborate with homeowners and community organizations to identify demand for WETT-certified services and coordinate visits from out-of-town WETT-certified contractors when needed	Ongoing	TBD
Foster a culture of energy conservation and environmental stewardship	Encourage recycling through education, incentive-based initiatives, school programs, etc.	Ongoing	Community-wide
	Promote rainwater harvesting for non-potable use through education and exploring potential incentives	Ongoing	Community-wide
	Consider incorporate energy efficiency into existing programs and events such as Christmas lights contest (e.g. bonus points for LED lights), midnight sun event (e.g. showcasing solar technologies).	Ongoing	Community-wide
	Support an ongoing, community-wide effort to promote simple, high-impact energy-saving actions.	Ongoing	Community-wide

Funding Opportunities

Successful implementation of the Community Energy Plan will require access to funding and resources. Various funding programs are available to support energy efficiency, renewable energy, and infrastructure upgrades. A list of relevant funding programs can be found in Appendix 1.

In addition to the programs listed, the Northwest Territories Association of Communities (NWTAC) provides up-to-date information on funding opportunities and other energy planning resources through its online toolkit. Community leaders and organizations are encouraged to visit NWTAC's Energy Toolkit[5] for guidance on available funding sources, application processes, and best practices for implementing energy projects.

Next Steps

With energy strategies in place, the focus now shifts to implementation. This involves launching projects, securing resources, and ensuring that progress is effectively measured. Maintaining open communication with the community will be essential, allowing for feedback and adjustments as needed.

Regular Check-Ins

To keep the plan on track, regular check-ins will help answer key questions:

- *Are projects being completed as planned?*
- *How do we measure success and impact?*
- *What has worked well, and what challenges have emerged?*
- *What lessons can guide future energy initiatives?*

[5] https://energy.toolkitnwtac.com/

Annual Review

To ensure continued progress, the Town Council will review the Energy Action Plan annually, assessing its implementation, relevance, and impact. This review will identify successes, challenges, and any necessary updates. Additionally, community organizations such as the Inuvik Native Band (INB), Nihtat Gwich'in Council (NGC), the Inuvik Community Corporation (ICC), and the Inuvik Métis Council are encouraged to participate in the annual review process to align efforts and strengthen collaboration. Progress updates will be shared with the public to keep residents informed and engaged.

Energy planning is an ongoing process. As projects are completed, new challenges and opportunities will arise. Updating the community energy profile regularly will provide a clearer picture of energy use and emerging needs, helping to guide future planning and decision-making. Lessons learned from this cycle will shape the next round of strategies and actions. By committing to regular reviews, encouraging broad participation, and maintaining transparent communication, the community can stay on course toward a sustainable energy future.

Appendices

Appendix A – Funding Programs

Government of Canada

Wah-ila-toos Program

The Government of Canada has allotted $300 million in funding for clean energy projects until 2027. The funding is available for a range of projects, like energy-efficient upgrades to buildings, renewable energy, capacity-building initiatives and feasibility studies.

The focus of this program is indigenous, rural, and remote areas that rely on fossil fuels for heat and power. Indigenous-led projects, and community partnerships, will be prioritized. This funding can provide support at all project stages.

There is no deadline to apply for this funding.

Government of the Northwest Territories

Anti-Poverty Funding

This funding program from the GNWT is targeted towards reducing poverty in the NWT. This funding supports projects that provide a service or support at the community level, improve social outcomes for residents, propose a new approach to an existing program or service in the community, and develop meaningful partnerships between organizations and support an integrated approach to responding to multiple social issues.

There is $1.75 million in funding available each year. There is no project minimum or maximum to apply for this funding. The deadline to apply for this project is January 31st every year.

Federation of Canadian Municipalities (FCM)

Green Municipal Fund

5 Energy-related focus areas:

- Sustainable municipal buildings
- Municipal fleet electrification
- Community energy systems
- Net-zero transformation
- Organic waste-to-energy

Arctic Energy Alliance

Energy Efficiency Incentive Program
The Energy Efficiency Incentive Program was designed to provide rebates to homeowners and consumers who purchase new, more energy efficient models of products that they use every day. Buying energy efficient products will help you save energy costs while reducing greenhouse gas emissions.

Alternative Energy Technologies Program
This program provides funding for renewable energy sources such as solar, wind, wood pellet heating, biofuel/synthetic gas, and ground source heat pumps. This funding is available to communities, commercial businesses, and NWT residents.

Community Government Building Retrofit Program
This program supports upgrades to community government–owned buildings, which will reduce their use of electrical/heat energy and water. The Arctic Energy Alliance (AEA) staff can help you get a handle on your building's current energy use. They can also help you figure out the best opportunities for savings, and the cost of upgrades and materials to get those savings. Community governments can also hire AEA to manage the implementation of energy upgrades for a fee.

Commercial Energy Conservation and Efficiency Program
Arctic Energy Alliance (AEA) has energy experts and money available to help your businesses conserve energy and improve energy efficiency. If you own a business and are interested in saving money by reducing the amount of heating fuel, electricity and water used, or want to reduce your greenhouse gas emissions, this program is for you.
Indigenous Clean Energy

Multiple Programs
Capacity-building, skills development, career training and mentorship.

Centre for Indigenous Environmental Resources

Energy InSites – Accelerating Indigenous Community Energy Retrofits
A building retrofit program that reduces energy consumption and emissions from existing buildings in Indigenous communities.

Appendix B – Acronyms

List of Acronyms

AEA – Arctic Energy Alliance
ARI – Aurora Research Institute
BDDEC – Beaufort Delta Divisional Education Council
CEC – Community Energy Champion
CGSI – Community Garden Society of Inuvik
EMO – Energy Management Opportunity
GHG – Greenhouse Gases
GNWT – Government of the Northwest Territories
GTC – Gwich'in Tribal Council
ICC – Inuvik Community Corporation
INB – Inuvik Native Band
ISCC – Innovation, Inuvialuit Science and Climate Change
IRC – Inuvialuit Regional Corporation
ISR – Inuvialuit Settlement Region
ITI – GNWT Department of Industry, Tourism and Investment
ITK – Inuit Tapiriit Kanatami
LNG – Liquefied Natural Gas
NEL – Nihtat Energy Ltd.
NGC – Nihtat Gwich'in Council
NTPC – Northwest Territories Power Corporation
SNG – Synthetic Natural Gas
TOI – Town of Inuvik

Appendix C – Energy Management Opportunities for Municipal Buildings

Inuvik Library

EMO List

EMO	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Reduce space temperature setting	0	1,200	$1,900	$0	0.0
Install on-demand water heaters (elec to fuel)	14,000	-1,500	$12,000	$6,550	0.5
Convert fluorescent lighting to LED	3,200	-270	$2,800	$11,000	3.9
Convert HID exterior lighting to LED	3,200	0	$3,200	$6,900	2.2

- The mechanical room was very hot during the walkthrough; the thermostat was set to 25°C but the room is being over heated by waste heat from the mechanicals, this setting can be reduced to 15°C to help mitigate the issue.
- The interior fluorescent lighting is being replaced with LEDs as they fail. Unsure what percentage of lights have already been replaced so an estimated 50% was used.

EMO Summary

	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	20,000	-570	$20,000	$24,000	1.2

Midnight Sun Rec Centre

EMO List

EMO	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Unoccupied setback	0	9,200	$15,000	$15,000	1.0
Convert fluorescent lighting to LED	17,000	-1,400	$15,000	$38,000	2.5
Remove vending machine display lights	690	0	$790	$160	0.2
Unplug fridges in community hall when not being used	5,300		$5,100	$0	0.0

- Reducing building temperature will also reduce the amount of cooling needed for the ice plant.
- 90% of all lighting has been replaced with LEDs.
- Electronic boiler controllers have been installed. Town of Inuvik is planning to do a complete overhaul to have the pneumatic system replaced with electric/DDC controls.

EMO Summary

	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	23,000	7,800	$36,000	$53,000	1.5

Town Hall

EMO List

EMO	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Replace inoperable zone valves	0	1,600	$2,500	$1,100	0.4
Convert Fluorescent lighting to LED	5,200	-430	$4,600	$19,000	4.1
Convert HID exterior lighting to LED	4,000	0	$4,000	$8,900	2.2
Repair seals on firehall bay doors		9,100	$14,000	$6,600	0.5

- Unsure if zone valves have been replaced; they should be inspected and maintained as part of annual maintenance.
- The interior fluorescent lighting is being replaced with LEDs as they fail. Unsure what percentage of lights have already been replaced so an estimated 50% was used.
- The firehall bay doors have been patched with pieces of firehose to reduce the air leakage; however, they should be professionally replaced to eliminate this air leakage as best as possible.
- One of the two glycol circulation pumps have been replaced with an ECM pump; the second one should also be replaced.

EMO Summary

	Electricity Savings (kWh)	Natural Gas (m^3)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	9,200	10,000	$25,000	$36,000	1.4

Dog Pound

EMO List

EMO	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Reduce space temperature setting	0	23	1.3	$1,700	$0	0.0
Nighttime setback	0	11	0.6	$840	$1,500	1.8
High-efficiency boilers or furnaces	0	59	3.4	$4,300	$11,000	2.6
Install ECM pumps	880	0	0.6	$850	$5,000	5.9
Insulate pipes in mechanical room	0	12	0.7	$880	$630	0.7
Install HRV	0	110	6.4	$7,800	$7,700	1.0
Convert fluorescent lighting to LED	420	-1	0.2	$310	$480	1.5
Incandescent to LED exit signs	470	-1	0.3	$350	$560	1.6
Convert HID exterior lighting to LED	820	0	0.6	$800	$2,700	3.4
Dim kennel lights at night with timer	500	0	0.4	$380	$420	1.1

- The interior fluorescent lighting is being replaced with LEDs as they fail. Unsure what percentage of lights have already been replaced so an estimated 50% was used.

EMO Summary

	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	3,100	210	15	18,000	30,000	1.7

Homeless Shelter

EMO List

EMO	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Unoccupied and nighttime setback	0	41	2.4	$3,000	$7,400	2.5
Zone valve check	0	41	2.4	$2,984	$3,130	1.0
High-efficiency boilers or furnaces	0	77	4.5	$5,700	$11,000	1.9
Install ECM pumps	880	0	0.6	$860	$3,800	4.4
Occupancy sensors	710	-2	0.4	$530	$1,600	3.0

- Unsure if zone valves have been replaced; they should be inspected and maintained as part of annual maintenance.

EMO Summary

	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	1,600	160	10	13,000	27,000	2.1

Utilidor Shop

EMO List

EMO	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Boiler controller with outdoor reset	0	74	4.3	$5,400	$1,800	0.3
Unoccupied setback	0	59	3.4	$4,300	$2,200	0.5
Install ECM pumps	1,000	0	0.7	$1,000	$3,800	3.8
Bathroom exhaust fan on timers	18	2	0.1	$180	$200	1.1
Wall insulation	0	120	6.9	$8,500	$29,000	3.4
Ceiling/roof insulation	0	69	4.0	$5,000	$19,000	3.8
Convert fluorescent lighting to LED	700	-2	0.4	$550	$2,300	4.2
Convert HID exterior lighting to LED	210	0	0.2	$200	$820	4.1
Occupancy sensors	2,900	-9	1.6	$2,100	$2,300	1.1
High-efficiency boilers or furnaces	0	120	6.9	$8,600	$11,000	1.3

- The interior fluorescent lighting is being replaced with LEDs as they fail. Unsure what percentage of lights have already been replaced so an estimated 50% was used.
- A new bay door was installed in 2024.
- An electric hot water tank is installed. Since there is not much DHW load, replacing this is not a priority but when it fails, a fuel-fired tank should be installed.
- The Town of Inuvik has indicated they want to build a new shop that will double as a storage warehouse.

EMO Summary

	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	4,800	430	29	36,000	72,000	2.0

Water Treatment Plant

EMO List

EMO	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
Set the boiler controller with outdoor reset	0	380	22	$28,000	$610	0.0
Reduce space temperature setting & install wireless communicating thermostats	0	410	24	$30,000	$17,000	0.6
Install de-stratification fans in main plant area & turn off heating to AHU	-21,000	610	20	$24,000	$45,000	1.9
Install ECM pumps for heating circulation	970	0	1	$960	$4,100	4.3
Convert fluorescent lighting to LED	7,000	-22	4	$2,700	$5,800	2.1
Occupancy sensors	1,700	-5	1	$1,300	$1,600	1.2

- The interior fluorescent lighting is being replaced with LEDs as they fail. Unsure what percentage of lights have already been replaced so an estimated 50% was used.

EMO Summary

	Electricity Savings (kWh)	Propane (GJ)	GHG Savings (tCO2e)	Annual Cost Savings	Estimated Capital Cost	Payback (Years)
All EMOs	-11,000	1,400	71	87,000	74,000	0.9

Appendix D – Community Survey Results

Inuvik Community Energy Planning Survey

160 Responses

1. Are you

Over 18 years old	136
Under 18 years old	24
Age 15 - 18	8
Age 12 - 14	16

2. What is your housing situation?

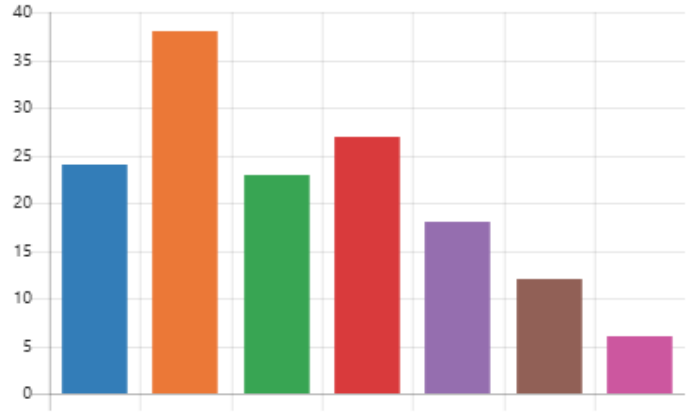
Homeowner	49
Renter	71
Living with family or friends	31
Other	3

3. Which of the following utilities do you pay? (Check all that apply)

Heating	71
Electricity	117
Water and garbage	65
None of the above	33
Other	5

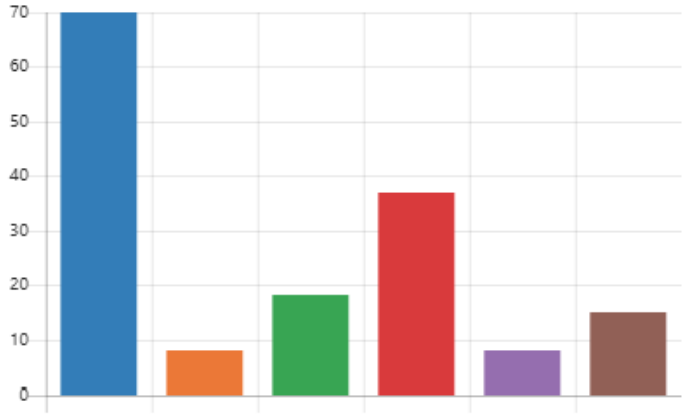
4. How many people usually live in your home?

1	24
2	38
3	23
4	27
5	18
6	12
More than 6	6



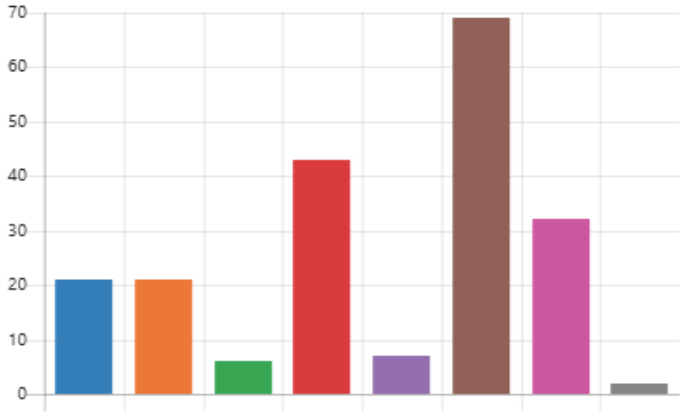
5. What type of building do you live in?

House	70
Duplex	8
Three or Four plex	18
Apartment or Condo	37
Townhouse	8
Other	15



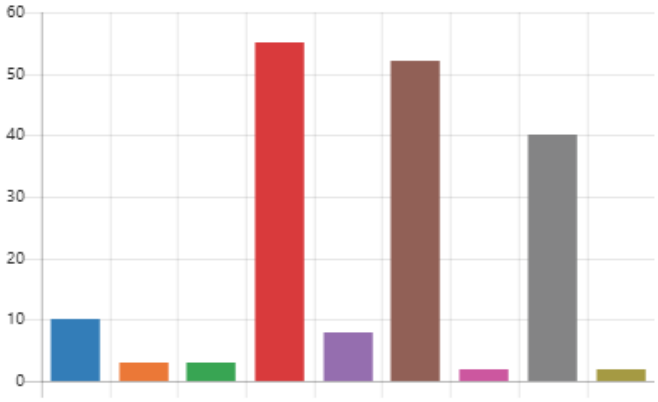
6. How do you heat your home? (Check all that apply)

Heating Oil	21
Cord Wood	21
Wood Pellets	6
Electricity	43
Propane	7
Natural Gas	69
Not Sure	32
Other	2



7. How do you heat your domestic hot water? (Check all that apply)

Heating Oil	10
Cord Wood	3
Wood Pellets	3
Electricity	55
Propane	8
Natural Gas	52
Solar hot water	2
Not Sure	40
Other	2



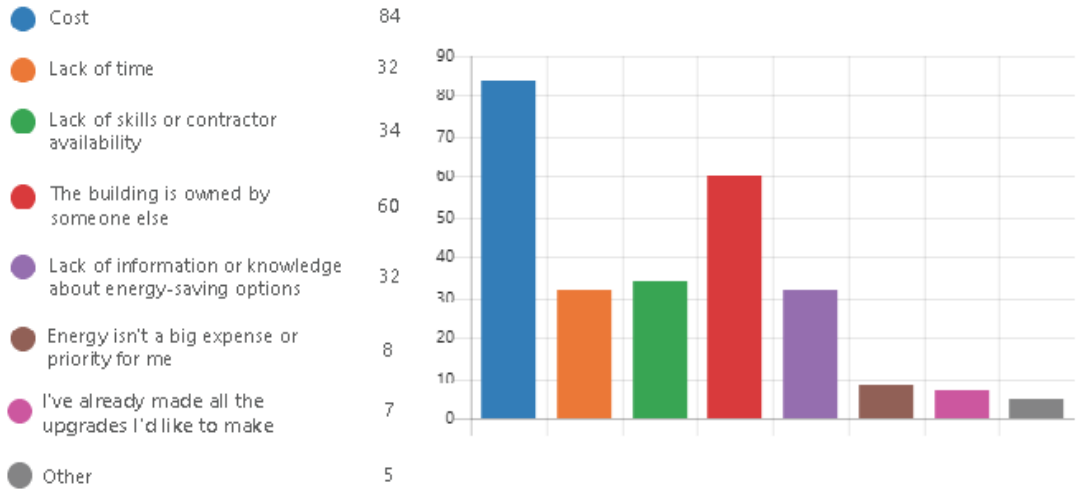
8. How important is it to you to reduce energy usage?

Very important	109
Somewhat important	47
Not important	1

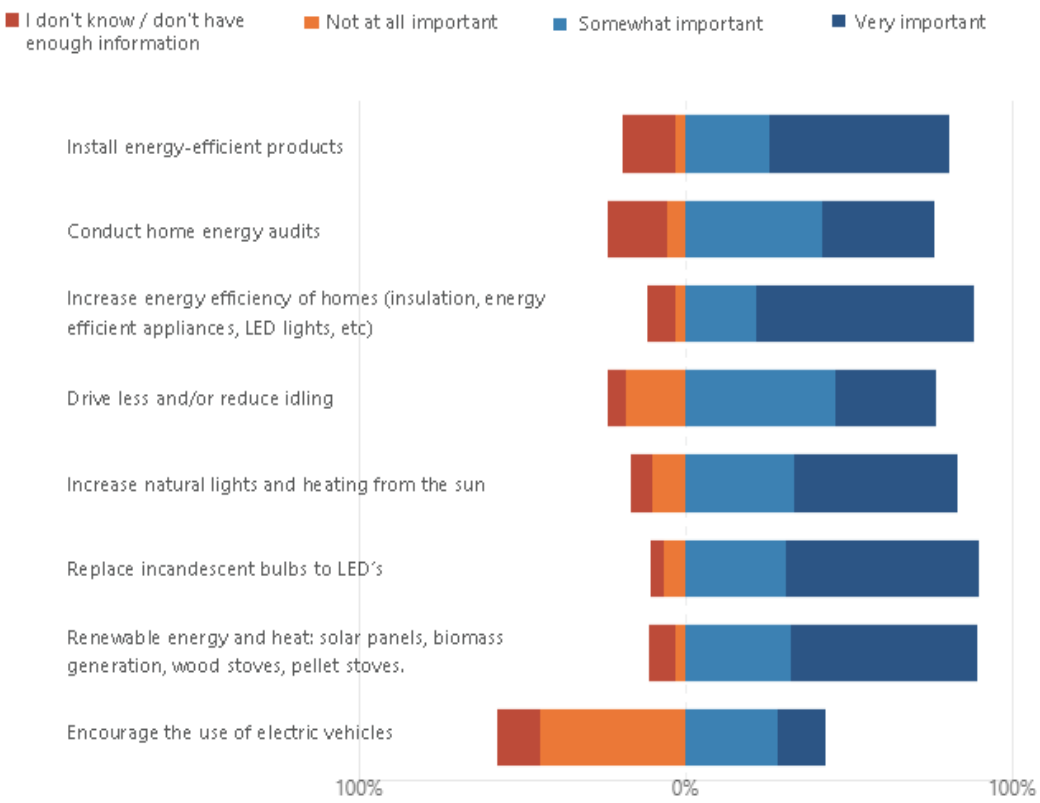
9. How concerned are you about the impacts of climate change on Inuvik?

Very concerned	97
Somewhat concerned	53
Not at all concerned	7
Other	0

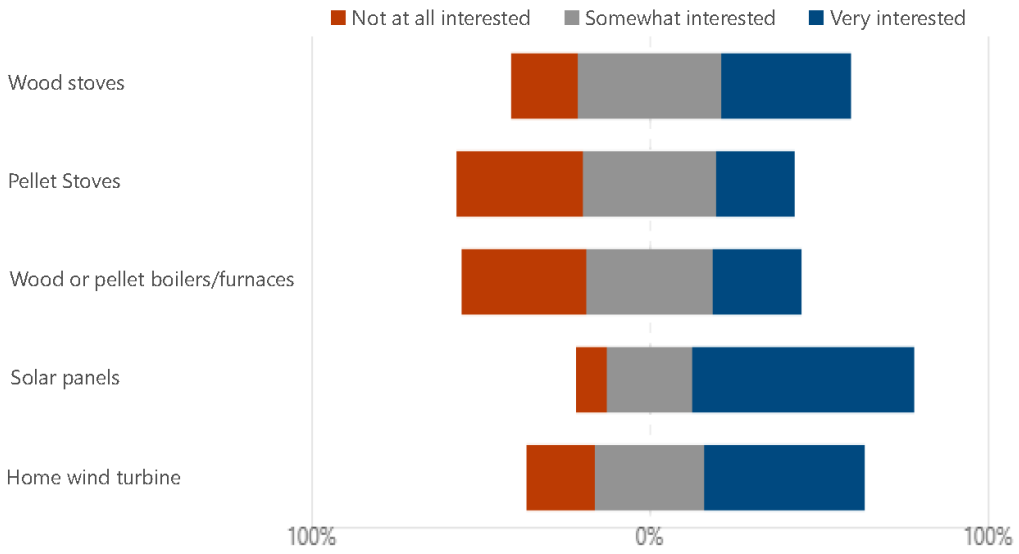
10. What has held you back from doing more to increase your home's energy efficiency? (Check all that apply)



11. How important are the following actions/strategies to you to help reduce energy usage in the community?



12. How interested are you in the following renewable energy technologies?



13. What barriers do you think exist for adopting renewable energy technologies in Inuvik? (Check all that apply)

14. Are there any specific energy programs or projects that you think could benefit Inuvik?

Are there any specific energy programs or projects that you think could benefit Inuvik?
Maybe not energy specific to Inuvik but a thrift/second hand store would greatly reduce the amount of garbage that heads to the dump - especially with such a transient community
Implement through the school for the teenagers to gather wood for the elders. They learn skills and elders are kept warm.
Getting rid of the Power Corp is my number one solution, but not realistic. So, an affordable home solar opportunity would be great.
Home energy audits
Biogas
Solar panels
I would get solar if power corp would do the buy back program again but we didn't own a house when they first did that so we missed out
Solar rebates
Wind turbines
More education on solar power
Recycling year round
It should be cost effective
It's fantastic to see the community continuing to add more solar and wind power. Going forward, anything we could do to make our heating more sustainable would be great.
Solar panels
Solar panels. But I heard we can't do anymore I. The community
Solar panel education and rooftop windmills.
More for renters
More windmills
Here are some energy program and project ideas that could benefit Inuvik: _Renewable Energy Projects_ 1. _Solar energy_: Inuvik's high latitude and clear skies make it an ideal location for solar energy harvesting. 2. _Wind energy_: Wind turbines could be installed in the surrounding areas to generate electricity. 3. _Geothermal energy_: Exploring geothermal energy options could provide a reliable and constant source of
Use of solar panels for residents.
Wind turbine, wood stoves
More solar panels
More solar panel installation for private homeowners.
More wind turbines.
Building better energy efficient homes.
Provide incentives to and assistance in purchasing building materials.
assist elders with heating fuel or wood for our wood stove.
Fule subsidy for elders
Front costs for retrofitting instead of rebates.
Having more accessible WETT certified inspectors.
More "walkable" community. Encourage less reliance on vehicles
The new gas well in Tuktoyaktuk
Natural gas is my biggest cost so anything that would lower that cost
More wind power

Are there any specific energy programs or projects that you think could benefit Inuvik?
Inuvik could greatly benefit from renewable energy projects, particularly solar and wind energy, given its northern location and the potential for clean energy sources. A solar farm or wind turbines could help reduce reliance on diesel fuel, lower energy costs, and create more sustainable energy solutions for the community. Additionally, energy storage systems could be explored to store excess energy generated during peak production times. Implementing these projects would not only promote environmental sustainability but also enhance energy independence for Inuvik.
Inuvik could greatly benefit from renewable energy projects, particularly solar and wind energy, given its northern location and the potential for clean energy sources. A solar farm or wind turbines could help reduce reliance on diesel fuel, lower energy costs, and create more sustainable energy solutions for the community. Additionally, energy storage systems could be explored to store excess energy generated during peak production times. Implementing these projects would not only promote environmental sustainability but also enhance energy independence for Inuvik.
Hydro power; possible hydro electricity and water treatment plant.
Solar panels, Wood stove. Things like this to save costs
Better strategies to adapt the NTPC power plant to work with renewable energy like wind and solar.
A rebate for all homeowners
How to reduce less heat
Waste Management
Cost of new energy efficient furnace and electricity would be great for the winter. Cost of new furnace is so expensive
more wind turbines
Renewable energy programs
Yes there may be projects that we don't know about yet
Renewable like solar and wind
Showing people how to have renewable energy
Using more wind turbines
My home
Small wind turbines
Wood Furnace, Solar Panels, Wind Turbine
Take all the cars out. Walk More.
Pumped hydro or Satiigi outflow power generation and dam control to mitigate Spring high waters from Campbell lake
It looks like the solar panels must be working for both northmart and town of inuvik have them for their buildings.
Anything with sun and wind
Solar program for homeowners
I think having another source of power other than power Corp would be beneficial for the people paying power
Solar Panel especially during Midnight Sun there's a longer period of Sun on the Sky. We can use that period.
The solar farm seems like a good start, along with the biomass project
more pedestrian walkways
Additional local material recycling initiative to compliment existing facilities (Caps Off and Free Store). Cardboard pellets, recycled HDPE filament + plastic injection molding, etc.
Increased cap on the solar grid.

15. Which community or cultural values do you feel should influence the Inuvik Community Energy Plan?

Which community or cultural values do you feel should influence the Inuvik Community Energy Plan?
I don't think any, lack of knowledge
I think all plans should be presented to the Inuvik Band Council, IRC and GTC to ensure that no cultural values are compromised
Looking out for one another, shared opportunities.
Cost
Availability of domestic animals
It should all be included as a regional goal
Inuvik and all cultural values
Respect for traditional knowledge Self determination and autonomy
Here are some community and cultural values that could influence the Inuvik Community Energy Plan: _Indigenous Values_ 1. _Connection to the land_: Recognize the importance of the land and natural resources to the Inuvik community and prioritize energy solutions that minimize environmental impact. 2. _Community and family_: Emphasize the importance of community and family in energy planning, considering the needs of vulnerable populations, such as elders and children. 3. _Self-determination and ownership_: Support Indigenous self-determination and ownership in energy development, ensuring that the community has control over energy decisions and benefits from energy development. _Community Values_ 1. _Resilience and adaptability_: Prioritize energy solutions that promote resilience and adaptability in the face of climate change and other challenges. 2. _Affordability and accessibility_: Ensure that energy solutions are affordable and accessible to all members of the community, regardless of income or social status. 3. _Environmental stewardship_: Emphasize the importance of environmental stewardship in energy planning, considering the impact of energy development on local ecosystems and wildlife. _Cultural Values_ 1. _Storytelling and knowledge sharing_: Incorporate storytelling and knowledge sharing into energy planning, recognizing the importance of traditional knowledge and cultural practices in energy development. 2. _Respect and reciprocity_: Prioritize respect and reciprocity in energy development, ensuring that the community benefits from energy development and that energy solutions are designed with community needs in mind. 3. _Intergenerational thinking_: Emphasize intergenerational thinking in energy planning, considering the needs and aspirations of future generations in energy decision-making. By incorporating these community and cultural values into the Inuvik Community Energy Plan, the community can develop an energy plan that is tailored to their unique needs and priorities.
Need an environment impact study done prior to any proposed changes.
Aboriginal groups
Be mindful if the waters and birds.
on the land practices
Protection of our land. Use local resources to hear power our community.

Which community or cultural values do you feel should influence the Inuvik Community Energy Plan?
The college should provide more trades programs. Contractors should be more community oriented rather than only focussing on business contracts. How can Inuvik get their own power providers to get rid of the Power Corporation.
more home visits
Less waste and pollution and remembering costs
Wellness
When tippy do initiative make sure they benefit community as a whole. For the wind turbine project, the power cord saved money but the consumer remained the same. There was no benefit. Our cost of living is higher than ever.
Not giving up green space for a hideous solar panel farm
Bodies against pollution should back bodies against energy wastage.
The Inuvik Community Energy Plan should be guided by values of sustainability, self-reliance, and respect for the environment. Given the strong connection the community has to the land, incorporating traditional knowledge and practices into the energy planning process would be essential. It's also important to prioritize community engagement, ensuring that the voices of local residents, especially Indigenous groups, are heard and respected in decision-making. A focus on reducing energy costs and increasing access to clean, renewable energy would align with the community's values of stewardship and resilience.
I think all the Inuvialuit Settlement Region and Gwich'in Community should influence each other to find a community energy plan.
Every one of them
Cultural values live off the land using less energy and power
Reducing the cost or living and operating a business and more efficient use of renewable energy.
The whole community, not just cultural
Taking good care of the environment.
Residents continue to pay high costs for their energy. Reducing our dependence on these energy sources helps to decrease our vulnerability. The goal is to ensure a reliable, sustainable, and affordable energy supply that supports economic development and environmental protection.
The goal is to ensure a reliable, sustainable, and affordable energy supply that supports economic development and environmental protection.
Well incorporate the indigenous peoples to see how they can be involved in the renewable energy
Solar panels
When there's no sun people use more lights
Complex
All Cultures
Less pollution, More Biomass, Traditional Heating, Growing-not polluting
Traditional Knowledge
Traditional Culture
Traditional Values
More PR regarding development of M-18 and other natural gas wells.
I think the values should be in the hands of a people voted in from community members
Only can think of some information of how each project for heating homes with solar panels are worth it, to upgrade and maintain. Are the cost in the end saving homeowner. I am always for anything that saves the planet with the understanding it is affordable to maintain in the end
Prioritize local ownership, capacity development and self-sufficiency. 7 generations teachings (i.e. all projects must demonstrate consideration of impacts to 7 future generations).

16. Is there anything else you would like us to know?

Is there anything else you would like us to know?
We should be more conservative on the energies we use .
Electrical vehicles are likely not a good solution in Inuvik
Always interested in any information that let us homeowners know what can save energy and cost for us.
This survey is definitely more geared towards home owners. I would say with community energy initiatives that it's important to look at emissions reducations from an equity/accessibility perspective, in that tons of people in town do not own homes or land that they will benefit from upgrading. And I saw that EVs were mentioned in the survey - electric cars are not practical given our remote location and cold temperatures (they are great down south!). If the Town is going to work on reducing emissions from energy consumption, what about a "bike all winter" program like other communities have? Give free winter tires + installation to people who register to get them using active transportation over driving in the winter when idling time is really high. Or promote active transportation by having some sort of themed week rewarding people who share on social media that they walked to work. If money is going to flow into energy initiatives in the community, I hope they have the opportunity to impact people of all walks of life, not just those with the financial means to afford property.
More community events for learning
I did an audit one time for my house and never seen it offered in the community again. Would be nice to see you doing more in the community of Inuvik. Work with aboriginal leaders and do some programs for the the community. Work with yielding owners to save money on the building they own. Do an open house each month and work with the people of Inuvik. Push a sale on solid panels or give an insensitive buy 2 light bulbs and get 2 free. Need to be creative to get community on board for green energy with prices rises we sure could use the help to save.
Thank you for taking this initiative. I really hope we do better in terms of energy saving which is rather to be known as "Environment Saving" approach for the future.
Here are some additional thoughts: _Community Engagement_: Community engagement and participation are crucial in developing an effective energy plan. Ensure that all stakeholders, including community members, organizations, and businesses, have opportunities to provide input and feedback. _Collaboration and Partnerships_: Foster collaboration and partnerships among community organizations, government agencies, and private sector entities to leverage resources, expertise, and funding opportunities. _Flexibility and Adaptability_: Energy planning is a dynamic process. Be prepared to adapt and adjust the energy plan as new information, technologies, and opportunities emerge. _Evaluating Success_: Establish clear metrics and indicators to evaluate the success of the energy plan. Regularly monitor progress, identify areas for improvement, and make adjustments as needed. By considering these factors, you can develop a comprehensive and effective energy plan that addresses the unique needs and challenges of Inuvik.
Thank you for taking this initiative. I really hope we do better in terms of energy saving which is rather to be known as "Environment Saving" approach for the future.
Better build homes and contractors provide more assistance to home owners.
we applied for the Seniors fuel subsidiy and was denied cause we were told we make to much money.
I don’t know a lot about reducing energy consumption but glad you are asking.

Is there anything else you would like us to know?
I would just like to emphasize the importance of involving the community in every step of the planning and implementation process. Inuvik's unique geographic and cultural context means that solutions need to be tailored specifically to local needs and conditions. It's crucial to ensure that any energy projects are not only environmentally sustainable but also economically viable and culturally appropriate. By fostering collaboration between local leaders, residents, and experts, we can ensure that the community benefits from long-term, sustainable energy solutions.
Incentives/subsidies are incredibly helpful to guide people to make better energy choices. Those incentives have gone away and it has become very challenging to implement plans to make a home more efficient.
You can't install a pellet boiler system if pellets aren't available in town at an affordable rate and if there is not a trades that can service it. I recently redid my entire boiler room and moved to a high efficiency combo-boiler. There is only 1 company in town doing residential work. We has to go with what they are trained to service. It cost $29,000 for all the work and supplies. I received zero dollars in rebates from arctic energy alliance as it was done at the end of the year and their grants are depleted. We waited two years for the home audit from arctic energy. We have a pellet stove; however the availability and cost of pellets in Inuvik make it a poor choice for heating. Electric cars would be useless here unless you reduce the cost of electricity.
Educate every on how to save through winter seasons windows power keeping in the heat where it's not financially costly to do these things
We need to adapt better building strategies and more energy efficient designs to reduce energy consumption. We live in the Arctic and we know it gets cold, yet we are still insulating our houses and building like we live in the southern US.....
Help the community with funding to get solar panels.
What appliances uses less power?
Move to the renewable energy
Thank you for taking this initiative. I really hope we do better in terms of energy saving which is rather to be known as "Environment Saving" approach for the future.
reduce the cost of purchasing energy efficient big ticket items for homeowners
I would like to see an actual environmental impact study done on the very green energy source outflow from Satiigi Lake/reservoire which has a potentially unlimited supply of water from the East Channel through Campbell Lake. Satigii Lake fish stocks could geneticaly benefit from better fish migration as very little upstream fish migration can occur from Husky Lakes about 3kms away.

Photo by Kristian Binder